# ANNUAL REPORT

OF THE

# ARCHÆOLOGICAL SURVEY OF INDIA

## PART I, 1913-14.



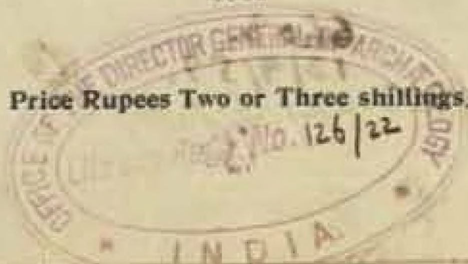

BY

SIR JOHN MARSHALL, KT., C.I.E., Litt.D., M.A., F.S.A.,
Hon. A. R. I. B. A., Vice-President of the India Society,
Director General of Archæology in India.





CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
1915



Price Rupees Two or Three shillings.

*Agents for the sale of Books published by the Superintendent Government Printing, India, Calcutta.*

*IN EUROPE.*

Constable & Co., 10, Orange Street, Leicester Square, London, W.C.

P. S. King & Sons, 2 & 4, Great Smith Street, Westminster, London, S.W.

H. S. King & Co., 65, Cornhill, E.C., and 9, Pall Mall, London, W.

Kegan Paul, Trench, Trübner & Co., 68—74, Carter Lane, E.C., and 25, Museum Street, London, W.C.

Grindlay & Co., 54, Parliament Street, London, S.W.

Bernard Quaritch, 11, Grafton Street, New Bond Street, London, W.

T. Fisher Unwin, Ltd., 1, Adelphi Terrace, London, W.C.

W. Thacker & Co., 2, Creed Lane, London, E.C.

Luzac & Co., 46, Great Russell Street, London, W.C.

Deighton, Bell & Co., Ltd., Cambridge.

B. H. Blackwell, 50 & 51, Broad Street, Oxford.

Oliver & Boyd, Tweeddale Court, Edinburgh.

E. Ponsonby, Ltd., 116, Grafton Street, Dublin.

Martinus Nijhoff, The Hague, Holland.

Ernest Leroux, 28, Rue Bonaparte, Paris, France.

*IN INDIA AND CEYLON.*

Thacker, Spink & Co., Calcutta and Simla.

Newman & Co., Calcutta.

S. K. Lahiri & Co., Calcutta.

R. Cambray & Co., Calcutta.

B. Banerjee & Co., Calcutta.

The Indian School Supply Depôt, 309, Bow Bazar Street, Calcutta, and 226, Nawabpur, Dacca.

Butterworth & Co. (India), Ltd., Calcutta.

The Weldon Library, 18-5, Chowringhee Road, Calcutta.

Rai M. C. Sircar Bahadur & Sons, 75-1-1, Harrison Road, Calcutta.

Higginbotham & Co., Madras.

V. Kalyanarama Iyer & Co., Madras.

G. A. Natesan & Co., Madras.

S. Murthy & Co., Madras.

Thompson & Co., Madras.

Temple & Co., Madras.

P. R. Rama Iyer & Co., Madras.

Thacker & Co., Ltd., Bombay.

A. J. Combridge & Co., Bombay.

D. B. Taraporevala, Sons & Co., Bombay.

Mrs. Radhabai Atmaram Sagoon, Bombay.

Sunder Pandurang, Bombay.

Gopal Narayan & Co., Bombay.

Ram Chandra Govind & Son, Kalbadevi, Bombay.

N. B. Mathur, Superintendent, Nazir Kanun Hind Press, Allahabad.

A. H. Wheeler & Co., Allahabad, Calcutta, and Bombay.

A. Chand & Co., Lahore, Punjab.

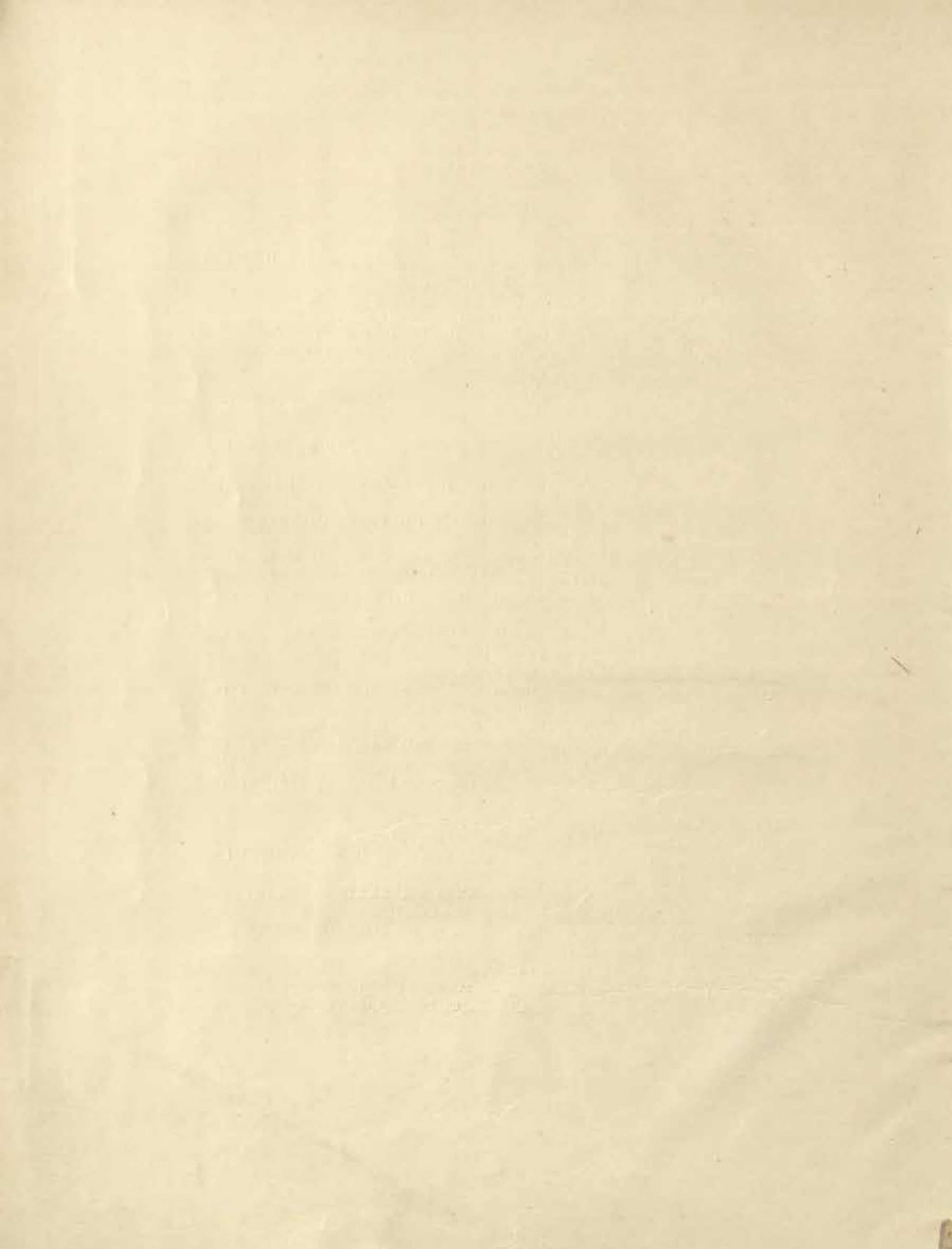
Rai Sahib M. Gulab Singh and Sons, Mufid-i-Am Press, Lahore and Calcutta.

Superintendent, American Baptist Mission Press, Rangoon.

S. C. Talukdar, Proprietor, Students and Co., Cooch Behar.

A. M. & J. Ferguson, Colombo, Ceylon.

# LIST OF PLATES.



# Annual Report of the Director-General of Archæology for the year 1913-14.

## PART I.

Conservation.

DURING the year 1913-14, expenditure on the conservation of ancient monuments in British India[1] amounted to a little under four lakhs, of which approximately[2] Rs. 1,60,000 was contributed by the Imperial, and the balance by the Local Governments. This sum shows a marked increase over the expenditure of the previous year, as well as over the average of the last five years. But the increase is mainly due to the liberal provision (Rs. 1,07,743 during the past year) that is now being made by the Government of India for the new Delhi Province. Except in the United Provinces, where far more has hitherto been done than in other parts of India, and in the Frontier Province, Baluchistan, Assam and Ajmer, where the monuments are relatively few, there is year by year a steady increase in the number of monuments in charge of the Government, and simultaneously a steady increase in the cost of repairing and maintaining them. Especially is this the case in Bengal, the Central Provinces and Bombay where, thanks to the wider and more systematic tours of inspection on the part of the local Archæological Officers, fresh monuments are constantly being added to the standard lists, and where the annual allotments have hitherto left little margin for the execution of initial or special repairs. In Bombay the local provision for conservation was raised from Rs. 20,000 to Rs. 30,000 during the year under review; but even this additional grant, substantial and welcome as it is, may have to be increased when times are more propitious; for the whole Western Presidency is teeming with monuments of every age and kind—the richest and most representative galaxy, to my mind, which exists in any Province of India—and among them, as for example at Champanir, there are many magnificent and historic structures, which are still the prey of the jungle and which at the present rate of expenditure must suffer irretrievable harm before

[1] The total amount spent in Native States is uncertain owing to the reluctance of some Darbars to furnish the figures.

[2] Precise figures cannot be given for the reason that in cases where conservation and exploration works are being carried out simultaneously, a rigid line cannot be drawn between them.

they can be rescued and conserved. In the Southern Presidency the budget grant of Rs. 43,000 was not fully utilised during the year, a sum of nearly ten thousand rupees being allowed to lapse. The reason for this has not been explained in the Report of the Local Superintendent, but that officer has been requested by the Madras Government to take care that such lapses do not occur in future.

**North of India: Muhammadan Monuments.**

In the north of India especial attention was, as I have indicated above, directed to the preservation of the monuments in the Province of Delhi. Here Mr. Gordon Sanderson accomplished a most useful piece of work by the preparation of a comprehensive scheme showing, on the one hand, the initial works which are awaiting execution in the new province, on the other, the annual repairs which will subsequently be entailed. This scheme was required by the Government of India with a view to gauging approximately the amount of archæological work to be done in the course of the next decade and making financial provision accordingly. It provides for special repairs to over a hundred monuments at a cost of four and a half lakhs, as well as for their maintenance at a further annual cost of Rs. 30,381. That Mr. Sanderson's scheme makes no claim to finality, need hardly be said, but there is little likelihood of any material additions having to be made to the programme while it is in process of execution. By the time it is complete, the scope of conservation will perhaps have widened somewhat, particularly as regards the lay-out of the surroundings of many of the monuments, and a supplementary programme may then be necessary.

Of the works actually in hand during the past year the most important relate to the Qutb and Purana Qila. At the former site a sum of nearly twenty-five thousand rupees was expended on grassing, planting and laying out paths in the northern court of the great Mosque; in clearing and dressing the ground in other parts of the enclave; in repairing the dressed stone base of the unfinished minar; in removing the mound constructed by Sir T. Metcalfe; in completing a *baradari* for the use of visitors; in installing a pumping plant in the two wells from which the area is watered; and in excavations and other improvements. In the course of these operations several discoveries of interest were made by Mr. Sanderson. One of them relates to the tomb of Altamish, in front of which a flight of steps was unearthed descending to a *tahkhana* beneath the main tomb. The *tahkhana* had been filled in with débris before the heavy marble cenotaph was placed on the floor of the upper chamber, and it was impracticable to clear it completely without endangering the stability of the roof; the flight of steps, however, descending to it has been opened up, and enough of the débris has been removed to disclose to view part of the old floor and walls. The College of Alau-d-Din has also been completely cleared, and the remains of *dalans*, domed at intervals and similar to those on the west side, have been brought to light on the east and north sides of the central Court, together with the piers of what must have been an imposing entrance on the last mentioned side. In the course of clearing this site an effort was made to find some clue to the grave of Alau-d-Din himself, who is said to have been buried here, and in the western *dalan*, beneath some seven feet of fallen débris, traces of what is evidently a grave platform were disclosed. The platform

is plain and devoid of carving, but its size and position indicate that it was invested with more than ordinary importance, and there is every probability that it is in fact the tomb of Alau-d-Din Khalji. A third discovery of interest concerns the great mosque, the double plinth of which has now been exposed (Plate I, *a*) on the south, east and north sides, and found to contain numerous carved stones of the Hindu period, which had been built at random into the masonry below the plinth level. This discovery disposes of the hitherto generally accepted belief that the masonry up to the top of the double plinth was originally Hindu work, untouched by the Muhammadan builders.

At the Purana Qila the most costly undertaking has been the wholesale removal of the modern houses and their inhabitants, which crowded the interior of the fortress (Plate II, *a*), and the general clearance of the ground preparatory to regrading and laying it out in a manner befitting so splendid a monument. In the course of this operation a small sunk bath of the Mughal period was brought to light in the vicinity of the Sher Mandal, and brick buildings of the Gupta epoch were also revealed in some of the lower strata. Other works that were also carried out in this fortress were the clearance of the great stepped *baoli* near the south-west corner of Sher Shah's mosque and of the three gateways in the east wall; the thorough overhauling of the southernmost of the latter, the masonry of which had been torn asunder and much damaged by jungle growth; and the repair of certain sections of the walls and their arches.

Among other monuments of note in the Delhi Province which have received special attention may be mentioned the following:—the Bijai Mandal, the fortress of Tughlaqabad, the old bridge and mosque at Wazirabad, the Jahaz Mahal near Mehrauli, and the Lat of Asoka in the Kotila of Firoz Shah, which was found to be in a parlous condition owing to the decay of the pyramidal structure on which it stands. Operations, too, of a minor character were carried out at the tomb of Muhammad Shah Lodi, and the Lodi Bridge at Khairpur; at the grave of Murtaza Khan in Sarai Shahji near Begampura; at the Chor Minar near the latter village and in the arcades inside the Kashmir Gate.

Elsewhere in the Northern Circle the most important measures of conservation among Muhammadan monuments have been at Agra, Lahore and Hissar. At Agra, the resetting of a large number of inlay stones, which were missing from the *pietra dura* decoration on the Tomb of Itimadu-d-Daula, has been satisfactorily completed; various improvements have been effected in the Taj Gardens; the modern ramps outside the entrance to Akbar's tomb at Sikandarah have been removed; and, at the same monument, a start has been made with the restoration of the great causeway which connects the east false gate with the mausoleum. At Lahore, the restoration of the Hazuri Bagh described in last year's report has been brought to a finish; the main gateway of the Badshahi Masjid, of which the parapets, turrets and finials were in a precarious state, has been repaired; new brick paving has been laid round the central tank in the Shalamar gardens; and a beginning has been made with the conservation of the "Roman Catholic Chapel" and Bari Khawabgah in the Fort, the intention being in the case of the latter to remove all modern additions and to expose once more the Mughal work hidden

beneath them. At Hissar, special repairs have been done to the Gujari Mahal and other monuments in the neighbourhood, and the courtyard of the Lat-ki-Masjid (Plate I, *b*) has been cleared of the accumulation of débris in which it was formerly buried, with the result that the appearance of the mosque is now much improved by the exposure of its elevated plinth, while an interesting series of underground chambers and flights of steps leading to them have been revealed beneath the mosque. The small domed structure with its several tiers of subterranean rooms is also being cleared, and it seems not unlikely that from this building an underground passage will be found communicating with the Palace buildings, which are now occupied by the Superintendent of Government Cattle Farms.

**Northern India: Hindu and Buddhist monuments.**

Of Hindu and Buddhist monuments in the Frontier and Northern Circles, there is little that need be said; for, in both cases the expenditure has been very limited and most of the measures carried out have been in the nature of petty annual repairs. In the former circle, a small plot of land was purchased and preparations made for the construction of a suitable enclosure to protect the inscriptions of Asoka at Mansehra, and estimates were framed for the conservation of the late mediæval temples at Bilot and Umarkhel in the Dera Ismail Khan District. In the Northern Circle, special repairs were executed at the Basheshar Mahadeo Temple at Bajaura, protection was afforded to the rock inscriptions at Kanhyara and Pathar, and materials were collected for the conservation of the famous shrine at Baijnath.

In this Circle, too, several interesting and little-known groups of temples at Dwarahat, Jagesvar and Champawat in the Almora District were thoroughly overhauled by Mr. Hargreaves and notes on their conservation submitted to Government. Three of these temples are illustrated in Plates II and III. At Jagesvar, which is one of the most celebrated *tirthas* in Kumaon, the temples are in an exceptionally fine state of preservation, the most noteworthy among them being the Jagesvar, which gives its name to the place, the Mrityunjaya, the Nava-durga, the Dandesvar and the smaller shrines of Balesvara, Kubera and Chandika. The Nava-durga Temple illustrated in Plate III, *a* is of especial interest from an architectural point of view on account of its unusual form, which recalls to mind the Dravidian raths at Mamallapuram and suggests an ultimate connexion with the early *chaitya* halls of the Buddhists. Other shrines of the same type at Jagesvar are those dedicated to Kalika, Pushti-devi and Chandika. Four brief inscriptions in the *mandapa* of the Mrityunjaya shrine appear to be assignable to the 8th century A.D., though the temple, as it now stands, is of considerably later date. "The temples at Dwarahat," says Mr. Hargreaves, "comprise no less than thirty-five examples, falling naturally into eight distinct groups. They are all of the Northern or Indo-Aryan type, while the most interesting one, that known locally as Gujar Deo, is of especial interest, resembling a type of mediæval temple of the 11th-12th centuries common in Rajputana and Gujarat, but not frequently met with in the Himalayan region. The others, less ornate but better preserved, are not earlier than the 14th century."

**Eastern Circle.**

In the Eastern Circle—comprising the Bengal Presidency, Bihar and Orissa, Assam and the Central Provinces, a wide reaching and on the whole liberal programme has been carried out under the immediate supervision of Mr. Blakiston,

Assistant Superintendent, who has shown himself indefatigable in the discharge of his duties. The various items of repair carried out in the course of the year numbered 188, of which 59 estimates were for special repairs. Of these it is only possible to notice a few of the more important. In the Bengal Presidency the preservation of the Gunmant Mosque at Gaur was taken in hand at an estimated cost of Rs. 1,559, and a sum of Rs. 2,269 was expended on various special repairs to other monuments at the same place and at Panduah. At Dehar, near Vishnupur, in the Bankura District, the small temple of Sareswar was saved from collapsing into a *nala* by the construction of a revetment wall and other necessary measures. A wire fence has been put up to protect the temple of Damodar at Suri in the Birbhum District, and the conservation of the mosques at Kharaul in the Murshidabad District, at Panduah in the Hooghly District, and at Astogram in the Mymensingh District, has been completed, though the first mentioned still remains to be fenced round.

In Bihar and Orissa, the majority of special estimates were concerned with monuments in the Shahabad District. In the Rohtasgarh Fort a sum of Rs. 1,707 was expended, and at Sassaram a sum of Rs. 4,079, the buildings which were under repair at the latter place being the Tombs of Sher Shah, Alawal Khan, Selim Shah and Hasan Sur Shah, together with the tank to the west of the last mentioned structure. At Chainpur in the same District special measures were carried out at the tomb of Bakhtiyar Khan, and the monuments at Shergarh, Bhabua and Buxar also came in for a variety of repairs. At Konarak in the Puri District a beginning was made in the construction of a shed to house the numerous sculptures which are lying about in the compound of the Black pagoda, and more Casuarina trees were planted round the enclosure in order to prevent the drifting in of sand. At Bhubaneswar the conservation of the *jagmohan* of the Chitrakarini Temple has been taken in hand and made good progress, while that of the early Buddhist *Stūpa* at Kesaria in the Champaran District has been finished. A suitable fence, let me add, has also been erected for the protection of the Asoka columns at Rampurwa, which were raised last year from the morass in which they had fallen, and removed to the rising ground near by.

**Assam.**

In Assam there is not a great amount of conservation work to be done, but what there is, deserves all the care that has been lavished upon it by Mr. Blakiston and the local Public Works Department. During this year special repairs have been undertaken and already completed at the Ahom Temple at Nigriting, and others are in progress at the Debidole and Shibdole Temples at Gaurisagar, and at the two temples of the same name, as well as at the Bishnudole Shrine at Sibsagar. At Dimapur some more of the fallen chess-men pillars have been re-erected, and other minor measures have been carried out at the same place and at the temple of Hayagriva Madhaba at Hajo in the Kamrup District.

**Central Provinces.**

Of the monuments which have received attention in the Central Provinces and Berar some illustrations are presented in Plates IV, V and VI, *a*. The first of these is of the Deogarh castle in the Chhindwara District. It was the principal stronghold of the powerful Gond Chief Bakht Buland, a contemporary of Aurangzeb, who embraced Islam in order to obtain the support of the Mughal Emperor. The fortifications and buildings are all in the Mughal style and interesting from an

architectural point of view, though of no great merit. They are, however, well worthy of preservation for the sake of their historical associations, as well as for the commanding and picturesque position which they occupy in the landscape. Of the structures in the interior of the castle the principal are the Naqqar Khana gateway, the Throne Room, which is now largely ruined, the Badal Mahal, three tanks and a small mosque; while in the valley below are another and larger mosque, two temples and a *baoli*. All these edifices, as well as the fortifications, are now to be cleared of jungle and débris and preserved, as far as possible, from further decay. To about the same period as the Deogarh Fort belongs also the Fortress of Balapur, in the Akola District (Plate IV, *b*), which was completed in 1757 by Ismail Khan, the first Nawab of Elichpur, and with the exception of the hill fort of Melghat, is the largest and probably the strongest fortress in Berar. It occupies a small hill at the confluence of the Man and Mhais rivers and is defended by a double line of fortifications, the inner being pentagonal in plan and provided with five bastions, the outer provided with eleven bastions, of which four have now disappeared. Much has been done of late years for the preservation of this stronghold, and it is now in a very fair state of repair. The third fort illustrated—that of Gawilgarh near Chikalda in the Amraoti District—is much older than the other two, having been built by the Bahmani King, Ahmad Shah Wali, as far back as 1425. From that time onward it played a leading part in the fortunes of Berar, becoming the principal stronghold of the Imad Shahi Dynasty in 1490, and then passing into the hands of Murtaza Nizam Shah of Ahmednagar in 1572, and into the hands of Akbar's generals 25 years later. In the third Mahratha war it was held by Beni Singh on behalf of the Bhonsla Raja, and in 1803 was stormed by General Arthur Wellesley. Fifty years later the fort was dismantled and for the next half century nothing whatever appears to have been done to save either the fortifications or the buildings within from ruin. The measures which have now been carried out consist in the eradication of all jungle, such structural repairs as are necessary to the walls and gateways, and the conservation of the Jami Masjid and Chhota Masjid.

Among other monuments in the Central Provinces, which have undergone special repairs are the Fort wall in Chanda City, a portion of which has been rebuilt: the temple of Bhawani at Barsi Takli, which has been fenced in; the Ranmuktesvara Temple at Kukkurmath; the Chand Suraj gateway and Chaubis Avatar Temple at Mandhata; and the Masjid of Bibi Sahib at Burhanpur (Plate VI, *a*), the interior of which was in a very precarious condition.

**Western Circle.**

The number of monuments which are now conserved and maintained by the Government of Bombay is, as I have remarked above, growing larger year by year; yet out of the long list of those which have been under repair during the past twelve months there are relatively few that claim particular notice. Perhaps the most important of them all are the groups of temples, both rock-cut and structural, at Badami, Aihole and Pattadakal, in the south of the Presidency, which comprise among their number some of the most valuable and instructive examples of early mediæval architecture. Among these groups of temples a systematic and comprehensive campaign of conservation is now being prosecuted, with a view to put all of them in a thoroughly sound state of repair, to clear the ground about them of jungle

and débris, and to protect them from further damage by the erection of compound walls. One of the later Dravidian examples—the Bhutanatha Temple at Badami—is illustrated in Plate VIII, *a*, in the condition in which it appears before any measures of repair have been executed, and the reader can appreciate from this photograph into how neglected and deplorable a state these temples have been suffered to fall. The estimate for this building, which was framed towards the close of the year under review and which, it is hoped, will be carried out in the near future, provides for the removal of jungle, for the resetting of loose and fallen masonry, the underpinning and repair of the stepped plinth, and the renewal, where necessary, of the roof covering. On the same Plate is also figured the Huchchimalligudi shrine at Aihole after the ground around has been levelled and the fabric itself rendered secure by underpinning the roof, pointing and other necessary measures. This shrine, which is probably to be referred to the beginning of the 7th century or even earlier, affords an admirable illustration of the influence which Indo-Aryan architecture was then exerting in regions as far south as Maharashtra. The crowning tower is, needless to say, typical of that style, but the plain treatment of its wall surfaces, its mouldings, its restrained decoration and other features also bespeak a close relationship with the contemporary flat-roofed temples of Central and Northern India. The carved slab, be it noticed, which adorns the base of the *sikhara* and on which the *tandava* of Siva is depicted in relief, is not contemporary with the rest of the structure. To judge by the figure of a Garuda over the door, the original building seems to have been dedicated to Vishnu.

In the monuments reproduced on the succeeding Plate (IX) we have the two noblest and most characteristic specimens of mediæval architecture in the whole of this district. Both are planned on approximately the same lines, with a great pillared hall or *mandapa* in front leading to a relatively small shrine surrounded by a narrow procession path, but while the elevation of the Papanatha Temple, which is the earlier of the two, is typically Indo-Aryan, that of the Virupaksha Temple, which was erected in the middle of the 8th century A.D.—during the reign of Vikramaditya II—is as typically Dravidian. Thanks to its being still in use for religious purposes, the latter temple was found to be in a relatively good state of preservation, and most of the repairs executed have consisted in the underpinning of pillars out of plumb, the filling of badly spalled joints, the relaying of floor slabs, the repair of the roof, and the removal of modern whitewash from the interior. The Papanatha Temple, on the other hand, was in a lamentable condition of decay, and not only had a vast accumulation of débris to be excavated, and heavy retaining walls built for its support on the east side, but even cattle, incredible as it may seem, had to be evicted from their stables in the interior, while the whole of the roof and most of the floor has had to be relaid in concrete.

Another interesting group which has continued to receive attention is that of the Portuguese buildings at Bassein, comprising the walls of the old fortress, the ruined Cathedral, Dominican Convent and the churches of St. Paul and St. Anthony, the last of which dates back as early as 1537. Of the church of St. Paul two illustrations are given in Plates VI, *b* and VII, *a*—the one a photograph of its highly decorative and well proportioned entrance, the other a

general view of the whole structure as seen from the north-east. On Plate VII is also reproduced an illustration of the Asar Mahal at Bijapur, the decayed roof of which has recently had to be replaced by a roof of steel and concrete. This new construction, which will add greatly to the strength and durability of the building, is effectually screened from view by the parapets of the roof and by the careful retention of the old wood framing and panelling of the interior; indeed, so cleverly has the work been carried out, that the appearance of the fabric has not suffered any visible change. Besides the above undertakings, special repairs were also carried out at the temple of Ambarnath in the Thana District, at the tomb of Mubarak Sayyid at Mehmadabad, at the Pandu Lena Caves at Nasik, at the Gondeshwar Temple at Sinnar, and at the Satyanjo Than at Rohri.

**Native States.**

Of conservation works executed in the Native States belonging to the Western Circle, the most noteworthy have been those in Hyderabad, Bharatpur, Dhar and Bhopal. Of the Buddhist monuments at Sanchi in Bhopal I shall speak presently, when describing the excavations that I have been conducting there on behalf of Her Highness the Begam. In Bharatpur, the Darbar has been giving effect to the recommendations made in my notes of 20th September, 1907, and 8th April, 1910, so far as they relate to the great mosque at Sikandarah, the Jhalar Baoli, and the minar and palace in the Fort at Bayana. In Hyderabad, a sum of over Rs. 27,000 has been spent upon the repair of thirteen monuments, the largest sums being devoted to the royal tombs at Gulburga, to the thousand-pillared hall at Hanamkonda, and to the *baradari* at Daulatabad. And at Dhar and Mandu steady progress has been made in the comprehensive campaign of rescue and repair, which was initiated some eight years ago and which is being financed in part by the State itself, in part by the Imperial Government. At Dhar the bulk of the work is already done, but at Mandu the campaign will take many years to complete; for the city is a vast one, with a circuit of over thirty miles, and there are many magnificent memorials of the Khalji rule still hidden within its jungles. The expenditure of the year on these two sites has amounted to Rs. 7,742-8-0, Rs. 900 of which was devoted to the Kamal Maula and Lat Masjids at Dhar, the remainder to Mandu, the principal estimates of the latter place being for the Rupmati pavilion, the Jami Masjid, the palace of Baz Bahadur, the tower of Victory and the Dharmsala.

**Madras.**

In the Madras Circle the not illiberal sum of Rs. 43,000 was, as I have stated above, provided by the Local Government; but nearly a quarter of this sum was allowed to lapse, and consequently less headway has been made in the Presidency than might reasonably have been expected. Indeed, Mr. Longhurst, the Superintendent, finds so little of importance in what has been done, that in his Provincial Report he contents himself with merely reproducing the statement of expenditure supplied by the Public Works Department without himself giving any description of the year's achievements. This summary dismissal of the subject, however, seems scarcely justified. For, apart from the great group of remains at Hampi, on which a sum of over twelve thousand rupees has been expended, there are many other monuments of great historic and architectural interest in the Presidency which have been under repair, and

undoubtedly the public would welcome a descriptive account, particularly if illustrated, of the more important of them and of the steps which the Local Government is taking to preserve them from misuse or decay. As examples of such monuments let me cite the temple of Virabhadra at Lepaksha in the Anantapur District, the roof of which has been saved from collapse at a cost of Rs. 1,144; the historic Fort at Gingee, on which a sum of nearly Rs. 10,000 is being spent; the Tanjore Palace, where the arsenal tower and various other structures have been rescued from ruin; the Forts at Palghat, Bekal and Atur, the Siva Temple at Taramangalam, and the shrines at Mamallapuram, Vellore and Tírukalitattai, all of which have come in for special repairs. But, though the Provincial Superintendent has nothing to tell his readers about the monuments which have actually been under repair, he gives, on the other hand, a good account of other no less interesting monuments which he examined in the course of the year and on the conservation of which he submitted detailed notes to the Local Government. Three of these monuments I have illustrated on Plates X and XI. They are the so-called Chandranath Temple at Mudabidri in South Kanara, the Chaturmukha Temple at Karkal, and the Jamalabad Fort at Beltangadi. The District of Kanara is well known for the peculiar character of its temple architecture, and in no part of the District are there such fine examples of this architecture as at Mudabidri. The main characteristics of the temples are their stone roofs with overhanging eaves, manifestly copied from wooden prototypes, the plainness and simplicity of their outward appearance, and, in marked contrast with this, the richness of their interior carvings. This strange architecture was exclusively Jaina and flourished in Kanara from the 12th century onwards for four hundred years: yet it shows no affinities either with the Dravidian style of the south or with the Aryan style of the north, or yet with the intermediate Chalukyan style. In some of its features, it does resemble the architecture of Nepal and other parts of the Himalayas, and the suggestion has even been made by Fergusson that some unrecorded connexion may have existed between those far off hill countries and Kanara, but the features referred to are such as might have been evolved quite naturally and independently in Kanara itself, and they are, in fact, no more an indication of a connexion with Nepal, than of a connexion with Scandinavia or any other country where climatic conditions have led to the evolution of similar roofs. At Mudabidri there are seventeen temples of this class, all belonging to the Jain religion, and of these seventeen the Chandranath Temple is at once the largest and the finest. The *manastambha,* which stands in front of the entrance of this temple (Plate X, *b*) is a good, though not an exceptional, example of these pillars, which are such a conspicuous feature of Jaina (and in a less degree of Hindu) temples in the South of India, and which are designed with a grace and sense of proportion unrivalled among monuments of this kind in any part of the world. To the same class of architecture as the Chandranath also belongs the Chaturmukha Temple at Karkal (Plate XI, *a*), eleven miles north of Mudabidri, but it differs from the former in that it is cruciform in plan and of decidedly less happy design. The fine rock Fort of Jamalabad near Beltangadi (Plate XI, *b*) was built by Tippu Sultan in 1794 in honour of his mother, Jamal Be. It stands on a lofty granite hill, 1,000 feet in height, the only approach to it being by a flight of steps

cut with great skill in the rock on its eastern side. "The walls, bastions and gateways," says Mr. Longhurst, "are constructed of carefully cut granite blocks and must have been of vast strength before they fell into ruins. Inside the citadel are two tanks and a small spring of good water close to the entrance gateway on the summit of the hill. On one of the ruined bastions reposes a dismantled iron cannon of European manufacture. The fort was captured by the British in 1799, but was soon afterwards surprised and taken by Timma Nayak on behalf of the Mysore pretender. It was recaptured in June, 1800, by British Troops from Mangalore." This historic ruin has now been included in the standard list of monuments preserved at Government expense and steps are being taken to remove the jungle which had overspread it and to save it from further dilapidation.

**Burma.**

In the Burma Circle activity continues to centre mainly in Pagan, Prome and Mandalay, which between them possess the finest monuments of the country, whether ancient or modern and whether built of stone, of brick, or of wood. At Pagan, three important structures underwent special repairs at a combined cost of Rs. 9,951. One of these was the Upali Thein (Pali: Upali Sima), an ordination hall said to have been consecrated by four monks from Ceylon headed by the Upali Thera. Its exact date is not known, but tradition, supported by an inscription more than a century old, ascribes it to the reign of King Anawrata—that is, to the 11th century A.D. The hall is a small but pleasing structure, almost unique of its kind and made all the more valuable by the frescoes which adorn its walls and ceilings, and which, though not as old as the building, are nevertheless of great interest for the history of Burmese art. Another of the three is the Seinnyet Ama, a temple of three terraces surmounted by a *sikhara* and traditionally ascribed to the 10th century A.D. That probably was the date of the original fabric, which appears to have been quite a humble structure, encased and added to on several subsequent occasions until it attained its present proportions. The temple was found in a very dilapidated and ruinous state and has had to have all its arches rebuilt and its roof relaid and rendered water-tight. The third monument and perhaps the most important of the trio is the Patothamya Pagoda (Plate XII, *a*), which is said to have been erected in the beginning of the 10th century and to be one of the earliest at Pagan. As its name "Father of many a temple" signifies, it was the model for numerous later edifices, among others, for the Ananda and Thappinyu Pagodas, though, as it stands, it appears to have undergone a considerable amount of reconstruction. In the course of the repairs of the past year, which included the relaying of the terraces, waterproofing of the roof, underpinning of walls, etc., a find was made in the débris of the small but excellently preserved bronze statuette (Plate XII, *b* and *c*) representing the Bodhisattva Gautama.

At Hmawza, as ancient Prome is now called, a sum of Rs. 5,242 was spent in providing a brick enclosure wall with gates for the magnificent old Bawbawgyi pagoda, which has been thoroughly cleared and overhauled in recent years, and a further sum of Rs. 3,383 was devoted to the erection of a brick shed to house the numerous funeral urns, sculptures and inscriptions, some of them in the Pyu character, which have been brought to light during the last decade. A similar shed has also been put up at Sagaing to house another valuable collection of lithic records,

which have been recovered there. At Mandalay, nearly all the money available has had to go to annual repairs, which, by reason of the monuments being of wood and exceptionally perishable, are more costly than at other places in Burma; but a small sum, nevertheless, was spared for repairing the screen of the Lion Throne which was in a sorry state, and for renewing the wooden fence posts round the Palace grounds.

**Ancient Monuments' Act.**

The Ancient Monuments' Act (VII of 1904) continues to work effectively and smoothly. In the Northern Circle forty Muhammadan and British monuments and ten Hindu and Buddhist were declared protected under Section 3. Of the former the majority are situated within the newly constituted Province of Delhi; among the latter are the monolithic temples at Masrur in the Kangra District and some ancient mounds in the Muttra District. In the North-West Frontier Province action was taken under the Act to protect the Asoka rock-edicts at Mansehra and the interesting temples and other remains at the two Kafirkots in the Dehra Ismail Khan District. In the Western Circle twenty-four monuments were brought under the provisions of the Act, the chief among them being the caves at Kondane and Ambivli and the ancient temples at Pattadakal. Moreover, agreements, under section 5 of the Act, were made with the owners of several monuments with a view to ensuring their proper preservation. In Burma power was taken under sections 20 and 23 of the Act to restrict excavations within the Yazagyo village tract in the Upper Chindwin District.

**Listing of Monuments.**

Thanks to the personal interest and liberal policy of His Highness the Maharaja Scindia, a new Department of Archæology has now been created in the Gwalior State, and a systematic survey of its antiquarian remains undertaken. In company with Mr. Garde, the State Inspector of Archæology, Mr. Bhandarkar, Superintendent in Western India, toured during the cold season of 1913 in the Bhilsa District and prepared a list of the monuments there. At the same time he also conducted excavations at the ruins of Besnagar, the ancient Vidisa, of which an account will be found in the section on Exploration. Equally gratifying in the matter of listing monuments was the action taken by the Government of Bihar and Orissa. Two posts of photographers with an adequate menial staff were there created during the year to assist Dr. Spooner in making a complete and careful survey of the remains within this Province. The monuments in the whole of the Tirhut Division have already been dealt with, and it is hoped that the work will be pushed on with even greater speed in future years Good progress has also been made in the Southern Circle and in the Province of Delhi. In the Attock and Rawalpindi Districts of the Punjab Mr. Hargreaves visited several important buildings and prepared notes on them for inclusion in the lists. And in Burma Mr. Duroiselle has succeeded in bringing the Provincial lists to completion.

**Exploration.**

In the field of Exploration the operations of the Department have centred mainly round the ancient sites of Taxila in the Punjab, of Sanchi and Besnagar in Central India, and of Pataliputra in Bihar, but some excavations on a smaller scale have also been carried out among the prehistoric remains in the Madras Presidency and at Pegu in Burma.

**Taxila.**

Of the topography and history of Taxila, and of the discoveries made by me during the two seasons 1912-13 and 1913-14, a lengthy account will be found in

Part II of my Report for the former year. Here, I shall very briefly summarise the main results attained during the second season. At the Dharmarajika *Stûpa*[1] (Plate XIII), by which name I shall in future designate the "Chir Tope," I continued my excavations round the east of the main building and was fortunate in finding this side of it in a much better state than the north or south. The ornamental stone carving above the upper procession path, which had entirely perished on the other sides, is here relatively well preserved (Plate XIV, *a*). Its most distinguishing features are its bold mouldings and a series of niches framed alternately by trefoil arches or doorways with sloping jambs, and divided from one another by Corinthian pilasters. This type of decoration is found also on some smaller *stûpas* on the site belonging to the third and fourth century A.D., and it serves, therefore, to confirm the conclusion at which I had previously arrived on other grounds, namely, that the superstructure of the Main *stûpa* was rebuilt about 300 A.D. Several more chapels on the east and south sides, belonging to the circle immediately around this *stûpa*, were also cleared and yielded another large harvest of stucco and terracotta heads, many of which, to judge by the large number found without arms, legs or torsos, appear to have been affixed to the walls of the chapels, tier upon tier, without any bodies beneath them. In the area to the south-west of the Main *stûpa*, that is to say, round about the building **L**, it may be remembered that last year I found a large number of Gandhara sculptures. It is now quite evident from the discovery of many others round the walls of this building, that they must have belonged to it, particularly as there is no other building in the vicinity from which they could possibly have fallen. This is important, because the structure in question is built of that particular type of large diaper masonry which came into vogue in the second century A.D., and consequently it furnishes us with another index to the date of these sculptures. Some further evidence on the same point was also afforded by the discovery of some Gandhara sculptures used for flooring in the chamber **M**[4], which appears from the character of its masonry—of the semi-ashlar, semi-diaper style—to have been constructed in the third or perhaps early fourth century A.D. As these sculptures were much worn and defaced, it may be confidently concluded that they had been carved at least a century before they were built into this chamber. It follows, then, that the Gandhara sculptures at the Dharmarajika *Stûpa* must have been executed mainly in the second century A.D., during the reigns of Kanishka, Huvishka and Vasudeva, for none of them have yet been found in any of the earlier strata. These sculptures are all of good style and belong probably to the flourishing period of the Gandhara School, which appears to have been developed during the Saka—Pahlava epoch and to have gained additional strength with the coming of the Kushans.

On the west of the Main *stûpa* I cleared away some thirty feet of heavy débris from the great mound which had accumulated here, and I am now reaching the tops of the surrounding buildings on this side. As the main approach from the city was on the west, the buildings at this point ought to prove of special interest. A little further out I also excavated another group of chambers and in one of these (namely,

---

[1] From two newly discovered records it is evident that the ancient name of the "Chir Tope" like that of several other *stûpas* in India and Burma was Dharmarajika.

in G5) I made a find of considerable value. The chamber in question was a Bodhisattva chapel, and no doubt there was a Bodhisattva image placed against the wall opposite the entrance. At this point I discovered buried beneath the floor and originally covered, as I believe, by the statue, a steatite vessel containing a vase of silver. Inside this silver vase was a small relic casket of gold together with a silver scroll (Plate XVI, *a*), the inscription on which I read and translate as follows :—

### Text.

L. 1. Sa 100.20.10.4.1.1 Ayasa Ashadasa masasa divase 10.4.1 iśa divase pradistavita Bhagavato dhatuo Urasa-

L. 2. kena Lotaphria-putrana Bahaliena Noachae nagare vastavena tena ime pradistavita Bhagavato dhatuo dhamara-

L. 3. ie Tachhaśie Tanuvae Bodhisatvagahami maharajasa rajatirajasa deva-putrasa Khushanasa arogadachhinae

L. 4. sarva-budhana puyae prachaga-budhana puyae araha(ta)na puyae sarvasa (tva) na puyae mata-pitu puyae mitra-macha-ñati-sa-

L. 5. lohi (ta) na puyae atmano arogadachhinae nianae hotu a . de sa ma parichago

### Translation.

In the year 136 of Azes, on the 15th day of the month of Āshāḍha — on this day relics of the Holy One (Buddha) were enshrined by Urasakes son of Lotaphria a Bactrian, resident at the town of Noacha. By him these relics of the Holy One were enshrined in the Bodhisattva chapel at the Dharmarājikā *Stūpa* in the Tanuva district of Takshaśilā for the bestowal of perfect health upon the great king, king of kings, the divine Khushaṇa; for the veneration of all Buddhas; for the veneration of individual Buddhas; for the veneration of the Saints; for the veneration of all sentient beings; for the veneration of (his) parents; for the veneration of (his) friends, advisers, kinsmen, and blood relations; for the bestowal of perfect health upon himself. May this gift be . . . [1]

The only other structures at the Dharmarajika *Stūpa* to which I need refer here are the group of *stūpas* on the north-side, P1, P3 and P6. The *stūpa* P1 (Plate XIV, *b*) is built in the heavy style of diaper masonry which came into fashion in the second century A.D. On the north side of it I brought to light a pair of gigantic Buddha figures, seated with their backs against the wall. Unfortunately, another building was erected about a century later, immediately in front of their faces, and the space between the two structures was too confined for me to obtain a photograph of them. Just west of these buildings I also unearthed two smaller *stūpas*, the style of which, coupled with the evidence of the stratum from which they spring, shows that they were erected about the end of the second or beginning of the third century A.D. This is an important point, because in one of them I found a relic casket accompained by coins of the Kushan Kings, Huvishka and Vasudeva. As an indication of the correctness of my conclusions regarding the dates of these kings I

[1] With questions of chronology arising from this record and from other fresh evidence at Taxila I have dealt in two articles in the *Journal of the Royal Asiatic Society*, October 1914 and April 1915.

may mention that previous to the opening of this *stūpa* my assistants and myself discussed its age, and arrived at the conclusion that it belonged to the reign of Vasudeva.

Sirkap.

Within the city of Sirkap and near its northern gate I have nearly completed the excavation of the building D, which now proves to be an apsidal temple — the largest of its kind in India — surrounded by a spacious compound with two raised platforms to right and left of the entrance and rows of chambers for the monks against the west compound wall (Plate XIV, *c*). The chambers in the plan (Plate XV), which appear to be abutting on to these, belong in reality to buildings of the Parthian epoch in a lower stratum; they have nothing to do with this temple, which was erected in the early Kushan period, probably during the reign of Kujula-Kadphises about 50 or 60 A.D. Last year I ventured the surmise that it was erected a few decades later, namely, at the beginning of the second century A.D., but the more precise chronology which I am now able to establish for the Kushan Kings and their predecessors, enables me to determine its age with greater accuracy. In the apse at the eastern end of the chapel there must once have stood a *stūpa*, as was always the case in such chapels, but unfortunately treasure seekers of some bygone age had forestalled me in its excavation, and I found not a single stone of its fabric *in situ*. The two platforms in front of the temple were, no doubt, the bases of *stūpas*, built of *kanjur* stone faced with stucco, like the small *stūpa* just outside this temple which I unearthed last year. Round about the two platforms I found numbers of *kanjur* blocks, which had evidently formed part of their superstructures, and a great array of reliefs in stucco and terracotta including human figures, lion brackets, pilasters, clusters of grapes and other devices, all of which had fallen from their sides. Two heads from here are illustrated in Plate XVI, *e* and *f*, the former of which is manifestly a Satyr of the true Hellenistic type.

To the south of this temple and on the east side of the main street I have excavated several large blocks of buildings, divided one from the other by narrow side streets. The two blocks nearest to the temple appear very irregular in the plan on Plate XV, for the reason that three separate strata of walls are represented, the earliest belonging to the Scythian period, the second to the Parthian, and the third to the early Kushan. To the last period belongs the well defined square house superimposed over the earlier remains of the block nearest the temple. Its design is of the usual type, comprising a square courtyard in the centre, surrounded by chambers probably in two stories, on the four sides. This is the plan of the ancient Buddhist monasteries of India, which were no doubt copies on a larger scale of the ordinary private houses. In two of the rooms of this house I found buried, under the floor, a large number of coins of Kujula-Kadphises, along with a few of Gondopharnes and Azes II, which were still in circulation in the time of Kujula-Kadphises. Coins of the latter kings I also found in great numbers in the earlier buildings of the next stratum below. The second block of buildings includes the very interesting shrine which I described in last year's Report (Plate XIV, *d*) and which belongs to the reign of Azes I, that is, to about the middle of the 1st century B.C. As to the complex of rooms behind this shrine, my excavations have not yet advanced far enough to enable me to discriminate clearly between the walls of the first and second

epochs, or to restore the plan of the building contemporary with the shrine. This I shall be able to do later on. Meanwhile, there are some small finds of importance made in this and the neighbouring house on the north, which deserve to be noticed. One of these is a beautiful bronze statuette of a child, perhaps Harpocrates, of pure Hellenistic workmanship (Plate XVI, *b*). This I unearthed in the small chamber near the south-west corner of the square house and in the Parthian stratum. Then, a little lower down in the same chamber, I brought to light an earthen jar closed at the top with a silver disc, and containing a large quantity of gold jewellery, a head of the Greek god Dionysus in silver repoussé (Plate XVI, *c*), some silver spoons (Plate XVI, *d*) and other articles. Among the jewellery, of which some specimens are shown in Plate XVII, were several finger rings—one with a lapislazuli intaglio representing a Greek warrior and engraved with an early Brahmi legend; also some elaborate gold earrings, a gold pendant and chain, and several gold bracelets. This deposit appears to have been buried beneath the floor of the chamber in the first century of the Christian era, but a number of the articles had then been in use for a considerable time, as is proved by the extent to which they are worn. I assign the bronze statuette to the middle of the first century B.C., and the lapis-lazuli ring and head of Dionysus, which is the finest example of Greek work yet discovered in India, to a century earlier. A little later on I exhumed another earthernware jar on the north side of the courtyard of the same house, which proved to contain a small figure of winged Aphrodite executed in gold repoussé (Plate XVII, *b*), a gold medallion bearing the figure of a Cupid (Plate XVII, *b*), a gold necklace, a number of jacinths cut *en cabuchon* and engraved with figures of Artemis, Cupid, etc., and—most important of all—a series of silver coins belonging to kings who appear to have followed the Pahlava Gondopharnes. Two of these, who have hitherto been unknown to us, are named Sapedanes and Satavastra. A third is the ruler Sasan,[1] whose existence is now definitely established. A fourth is a Kushan king, who is probably to be identified with Kujula-Kadphises.[2]

Among other articles, also, which I recovered in these two buildings I may mention the following: a small iron trolley running on four wheels; a handsome copper jug with lid and handle and some copper spoons and forks, a small Corinthian column exquisitely modelled in fine terracotta; some chalcedony and copper seals engraved with various devices and a number of stone vases and dishes carved with different designs.

The other two blocks of buildings are almost wholly of the Pahlava period, and their plans are consequently quite clear. The larger and more substantial (P) is the one towards the south—nearer, that is to say, to the centre of the city. I have not yet cleared the whole of it, but there is enough to show that it was a residence or palace of considerable importance. From east to west it measures over 250 feet, from north to south over 200; and it is still continuing on the east and north sides. So far as it has been exposed, the residence consists of five groups of apartments. The large court in the centre of the west side, with the chambers

[1] Coins of Gondopharnes with the legend *Sasasa* have long been known, but it has been a matter of dispute whether this legend contained the name of a ruler or was merely an unexplained epithet of Gondopharnes. From the new coins it is apparent that the former was the correct view. The legend reads: *Maharajasa Aspabhataputrasa tratarasa Sasasa.*

[2] The legend on these silver coins reads: *Maharajasa rajatirajasa Kushanasa Yavugasa.*

round it, contains the chief living rooms, one of which is a bath-room with a small tank in the middle and a channel to carry off the water. To the right of this is a smaller court with rooms around, probably for the retainers and guard. On the other, or left, side are the Zenana apartments for the women. These I have not yet excavated. Then, on the east side of the house, we have a fourth court containing a sort of *diwan* or hall raised on a high and well built plinth; and, at the side of this, a fifth court containing numerous chambers. These were probably the reception rooms for guests; and the adjoining court with the *diwan* was no doubt used for semi-public or official purposes. The plan of this house is exceedingly interesting in itself, but it becomes still more so, when we realise that it is an almost exact counterpart of the Assyrian palaces of Mesopotamia. This can best be illustrated by comparing it with the Palace of Sargon at Khorsabad.[1] In the latter we have the same great court surrounded by chambers, and, on the one side of it, the same court for retainers; on the other, the apartments of the Zenana; here, also, we have the other half of the palace occupied, just as it is in the residence at Taxila, by reception and public rooms. In the Palace of Sargon there is another block of apartments further out on this side, at the point where some more chambers are also beginning to appear in the residence at Taxila. In the Sargon palace, too, there is a Zikurrat tower to the side of the Zenana, and it will be very interesting to see if there is any building corresponding to it at Taxila. That an Indo-Parthian residence or palace at Taxila should be planned on the same lines as an Assyrian palace of Mesopotamia is not in any way remarkable, when we bear in mind the vitality and persistence of the influence which Assyria exerted upon Persia and the neighbouring countries. But it certainly gives an added interest to these buildings and helps us in our efforts to disentangle the archæological problems of this period.

One other discovery of interest that I must mention here, is that of a number of earthenware moulds for casting coins. These moulds were found in a chamber or shop immediately to the south of the building I have described, and it is probable that they formed part of the plant of some forger of the Pahlava epoch. The coins impressed in the moulds are those of Azes II.

From Sirkap I pass, lastly, to the temple of Jandial, which I have now completely excavated. It proves to be unlike any temple yet known in India, but its resemblance to a Greek temple is remarkable (Plate XVIII). The ordinary Greek peripteral temple is surrounded on all sides by a peristyle of columns, and contains a pronaos or front porch, a naos, cella or sanctuary, and, at the rear, an opisthodomos or back porch, known to the Romans as the posticum. In some temples, such as the Parthenon at Athens or the temple of Artemis at Ephesus, there is an extra chamber between the sanctuary, and back porch, which in the case of the Parthenon was called the "Parthenon" or chamber of Athene. Now, the plan of the new temple at Taxila is almost identically the same. In place of the peristyle of columns is a wall pierced by large windows at frequent intervals, with two Ionic columns *in antis*—that is, between pilasters—at the entrance. Then comes the pronaos, fronted

[1] *Cf.* Perrot et Chipiez, *Histoire de l'art dans l'antiquité*, Tome II, Plate V.

by another pair of Ionic columns just as in Greek temples; then the naos or sanctuary; and at the back of the temple another chamber corresponding to the opisthodomos. The only essential difference is that, instead of an extra chamber between the back porch and the sanctuary, we have in the Taxila Temple a tower of solid masonry, the foundations of which are carried down to a great depth—actually over thirty feet. This solid tower rose apparently above the roof of the temple, and access to its summit was provided by flights of broad steps, of which two still exist laid parallel with its sides. What the purpose was of this tower we can only surmise. That the temple was not Buddhist, is patent from the total absence of any Buddhist images or other relics among its débris, as well as from its unusual plan, unlike any Buddhist chapel that we know of. For similar reasons, also, we must rule out the idea that it was Brahmanical or Jain. My own opinion is that the tower in the middle of the building was a sort of *zikurrat*, tapering like a pyramid and ascended in just the same way as the *zikurrats* of Chaldaea and Assyria. I imagine, too, that on the summit of this *zikurrat* was a fire altar, and that the whole edifice was a temple dedicated to the Zoroastrian worship. This is the only plausible hypothesis which seems to me to explain the peculiar structure of the solid tower in the middle of the building and the entire absence of any images. The Persians, as we know, set their fire altars in high places, and raised on lofty substructures. We know, moreover, that the idea of the Assyrian *zikurrat* was familiar to the Persians, and there is nothing more likely than that they borrowed its design for their fire temples. Indeed, the *zikurrat* tower at Firuzabad has been thought by many authorities actually to be a fire altar. In favour, too, of my hypothesis, is the fact that during the Pahlava period, when this temple was constructed, Zoroastrianism must already have had a strong foothold at Taxila.

In the naos or sanctuary I found no trace of any image having been set up; but in the place which would, in a Greek temple, ordinarily be occupied by the cult-statue, a broad dais or platform has been constructed. This, I suggest, may have been the seat of the priests.

As to the elevation of this temple, the superstructure above the capitals of the columns was of wood, and perished in a fire which overtook the temple. It may be assumed, however, that the details of the superstructure, including the architrave, frieze, etc., were of the Ionic order, and in harmony with the Ionic style of the columns, pilasters and bold mouldings around the base of the walls. I do not, however, think that the temple had the hip roof usual in Greek temples. Had the roof been sloping, tiles must have been used on the outside, and some of them must inevitably have been found among the fallen débris. But there was not a trace of anything except great beams of wood and a thick layer of clay mixed with masses of plaster from the walls. I conclude, therefore, that the roof of the temple was flat, like the buildings of Persia, and that from the middle of this flat roof rose the tower crowned by its fire altar.

**Besnagar.**

At the time when Greek kings were ruling in the North-West, and Taxila was the foremost among the cities of that region, the plateau of Central India north of the Vindhya range was dominated by the powerful city of Vidisa, now a mere waste of desolated mounds near the modern Bhilsa. The

distance between these two great centres of ancient civilisation must have been well over a thousand miles by the old roads; for measured along the modern railway it is 957 miles; and it is a strange coincidence, therefore, that the sole monument now standing among the ruins of Vidisa is a stone *Garuda* pillar set up in honour of Vasudeva by a Greek named Heliodorus, the son of Dion, who came from Taxila as ambassador of king Antialkidas to the court of Bhagabhadra, the ruler of Vidisa (Plate XXIII, *a*). The inscription on the pillar which relates these facts was first copied by me in 1909, and published during the same year in the pages of the Royal Asiatic Society's Journal. It is the first lithic record found in India in which mention is made of any of the Greek kings of the Punjab, and in view of its unique interest and historical value, it seemed to me eminently desirable not only to examine the pillar on which it was carved and to ascertain whether it was still occupying its original position, but to explore as far as possible the whole mound on which it stood and to search for any remains that might exist of the shrine of Vasudeva, which, assuming that the pillar had not been shifted, might be expected to have stood in its near vicinity. Fortunately, the site of Vidisa now commonly known by the name of Besnagar, is situated within the territories of the Gwalior State, and the idea of having it scientifically examined appealed at once to His Highness the Maharaja, who made all necessary financial provision for the undertaking and readily acceded to the suggestion that the work should be carried out under the direction of Mr. R. D. Bhandarkar, with the help of Mr. Garde, the recently appointed Inspector of Archæology in the Gwalior State. Mr. Bhandarkar was engaged at Besnagar for nearly three months, *viz.*, from the middle of December, 1913, until the middle of March, 1914, when the dearth of labour and increasing heat made it necessary to postpone further digging until the following autumn.

The column of Heliodorus, locally called the Kham Baba, stands near the north-east corner of the mound and immediately in front of the house of a *pujari* named Pratappuri Gosai, to whom it and the adjoining ground belongs. The shaft itself is a monolith, octagonal at the base, sixteen-sided in the middle and thirty-two sided above, with a garland dividing the upper and middle sections; the capital is of the persepolitan bell-shaped type, with a massive abacus above, which must originally have been crowned by the figure of a *Garuda*. When I saw the column in 1909, its lower part was hidden from view by a square *chabutra* or platform built around it in modern times. With the consent of the *pujari* this *chabutra* has now been opened up by Mr. Bhandarkar, and the shaft found to descend another eight feet, six feet of the buried portion being smooth and the remaining two feet rough-dressed. The line of demarcation between the smooth and rough surfaces corresponds with the level of the original floor. The foundations of the pillar extended to a depth of nearly six feet beneath the base of the shaft and consisted of heavy slabs of stone and layers of laterite, murum, black earth and concrete well rammed. The pillar itself rested directly on the uppermost of the slabs, wedges of metal and stone chips being driven in between the two to maintain it in the perpendicular. I mention these details because the foundations are strikingly similar to other foundations of the Sunga period and prove beyond question that

the pillar is still occupying its original position, that the floor level referred to above was the floor level in the time of Heliodorus, and that the metal chisels or wedges found beneath the shaft were set there by the masons who erected it. One of these metal wedges was, at my suggestion, sent to Sir Robert Hadfield, F.R.S., who has been kind enough to analyse for me various other specimens of ancient iron and who has thrown much light on problems of metallurgy in ancient times. His report in this case is exceptionally valuable. "To my astonishment," he writes, "I find that it contains 70 % carbon, which means that the material is *steel* and could be hardened by heating and quenching in water. This is the first specimen I have found of really ancient date, in which there has been found a considerable percentage of carbon. The specimen, therefore, becomes of unusual interest." The composition of this specimen was as follows :—

| C. | Si. | S. | P. | Mn. | Cr. | Ni. | Fe. |
|---|---|---|---|---|---|---|---|
| ·70 | ·04 | ·008 | ·020 | ·02 | trace | trace | 99·5 |

The Brinell ball hardness number was 146 after all the scale had been removed. Whether these wedges were forged by Indian smiths at Vidisa or by Greeks in the train of the ambassador Heliodorus, is not of course known ; perhaps some further evidence on the point may be obtained when other early implements or weapons from Vidisa and Taxila come to be analysed.

What remains of the temple of Vasudeva was found by Mr. Bhandarkar to be mostly buried beneath the modern house of the *pujari*. The superstructure of this temple, like the superstructures of the early Buddhist temples at Sanchi, appears to have been of timber and to have perished in its entirety, but the lofty plinth is still preserved, and proves to have consisted (again like the plinths of the same age at Sanchi) of a rubble core faced with retaining walls of massive stone masonry. These walls have been exposed on the western and part of the southern and northern sides, but could not be followed further eastward owing to the presence of the *pujari's* house. Outside the retaining walls on the north and west sides Mr. Bhandarkar also brought to light a stone railing of a type hitherto unknown in India. In it the place of the usual cross-bars is taken by solid panels of stone let into uprights and crowned by a coping (Plate XXII). The remnants of a similar railing were also found by me during the past season at Sanchi. Judged from the point of view of lithic construction they are an improvement on the usual type of open railing with two or three cross-bars, copied directly from a wooden prototype, but on the other hand they are less pleasing to the eye than the latter and lend themselves less readily to decoration. On the east or front side of the temple this solid railing was replaced by an open railing of the ordinary pattern nearly ten feet high and devoid of all decoration. Parts of another plain open railing were also unearthed on the south side of the temple, having apparently fallen from the top of the retaining wall of plinth : and others again were found in the area to the east.

From the level at which the solid panelled railing was found there can be little doubt that it is of about the same age or probably somewhat earlier than the pillar of Heliodorus, which was erected about the middle of the second century B.C. These, however, are not the earliest remains on this interesting site. Deep below

the foundation of the solid railing Mr. Bhandarkar brought to light another massive wall of brick, which had already fallen to ruin and been buried before the solid railing or the pillar of Heliodorus were thought of. At what age this wall was built is uncertain. No kiln-burnt bricks have yet been found in India which can be referred to an earlier date than the fourth century B.C., and it is unlikely that such bricks came generally into vogue until the reign of Asoka; for the unwieldy size of the bricks used in the monuments of that age, coupled with their very inferior fabric, betoken but little experience in the art of brick-making. The probability is, therefore, that these foundations date from the Mauryan age, and this probability is strengthened by the size of the bricks, which average about the same dimensions as many bricks of that age. On the other hand, no great reliance can be placed on the size of bricks as a criterion of age, and in this case the brick-work is distinguished from any other known brick-work of the Mauryan age or, indeed, of any age period to the Muhammadan conquest by the presence of mortar instead of earth in the joints. I have not, personally, had an opportunity of examining this mortar, as its existence was not discovered by Mr. Bhandarkar until after I had paid my last visit to Besnagar, but I quote the following report on it kindly made by Dr. Mann, Principal of the Poona Agricultural College. "The mortar derived from the brick wall gave on analysis the following figures.

| | | |
|---|---|---|
| Total Siliceous matter . . . . | 51·60 | per cent. |
| Containing soluble Silica . . . . | 8·20 | " |
| Total Lime (CaO) . . . . . | 14·11 | " |
| Magnesia (MgO) . . . . | 2·74 | " |
| Combined Carbonic Acid . . . . . | 5·64 | " |
| (Equal to Calcium Carbonate) . . . . | 12·81 | " |
| Oxide of Iron & Alumina . . . . | 20·00 | " |
| Potassium & Sodium Chlorides . . . . | 0·30 | " |

"This analysis gives the idea of a well made mortar, prepared with a full recognition of the purpose served by sand and clayey matter in making the material, as well as lime." This is the first occasion on which mortar has been detected in any structure of a pre-Muhammadan date in India, and a unique interest, therefore, attaches to the discovery. It is much to be hoped that other specimens of such mortar will be found and further light thrown on the question of its age. For the present I incline to believe that it belongs to the Mauryan epoch.

**Sanchi.**

From the ruined ramparts of Vidisa the hill of Sanchi with its famous group of Buddhist monuments is distant about four miles in a south-westerly direction. In ancient days this settlement of the Buddhists stood in the same relation to Vidisa as the Dharmarajika *Stūpa* did to Taxila or the Deer Park at Sarnath to Benares, far enough removed from the city to be undisturbed by its turmoil and distractions, yet near enough to attract crowds of worshippers to its shrines. In Part I of my Report for 1912-13 I have described and given a plan of the numerous *stūpas*, temples, and monasteries which I brought to light at Sanchi in the course of that year; and inasmuch as I purpose to devote to my excavations on this site a special article in Part II of this Report, I shall notice here only a few of the more important features of the season's work. At the Main *stūpa* (seen in Plate XIX, *a*) a

clearance was effected of all the débris which had accumulated on the procession path, and numerous fresh dedicatory inscriptions were revealed on the old paving slabs beneath. Of the stairway, berm and upper railings many more plinth and coping stones, pillars and cross-bars were recovered from the débris on the central plateau and will eventually be restored to their original positions; but, before that can be done, the whole of the southern half of this great *stûpa*, which is now in a parlous state, will have to be dismantled and rebuilt. It was this side of the structure which was demolished in the early part of last century by Captain Johnson and subsequently restored by Colonel Cole; but instead of its core being solidly reconstructed of stone or brick, it appears to have been filled up largely with earth, with the result that the filling has steadily settled down year by year and the outer casing of stone has now caved in at the top and bulged out below, threatening to collapse at any moment and bring about the ruin of the western and southern gateways as well as the railing between them. To dismantle and rebuild half of the whole vast body of this *stûpa* will necessarily be a heavy and a costly task, but there is no alternative course, and considerations neither of labour nor of expense can be allowed to stand in the way when the safety of such priceless monuments of Indian art are concerned.

Much of the damage that has happened to the gateways of this *stûpa* is due to the ponding of water in and around the procession path, consequent on the sinking of the foundations and the deposit of débris round about the *stûpa*. This débris I have now entirely cleared away and, in order to provide for the complete drainage of the *stûpa* as well as of all the other structures between it and the retaining wall on the east, I have constructed a deep and *pakka* drain to carry off all water from this area and to discharge to the south of *stûpa* **3** and between temple **8** and monastery **24**. Similarly, other channels also have been constructed to drain the southern and eastern plateaus. At the same time, the levels have been regraded, and the old pavement, of which numerous patches were found around the Main *stûpa*, has been taken up and relaid at a suitable slope. In connexion with this pavement let me add that the cost of completely repairing it would be prohibitive, and I have therefore resorted to the expedient of relaying it in patches and of planting turf in between. This treatment has proved eminently satisfactory so far as its appearance goes, but care will have to be taken in future years to keep the grass well trimmed.

Continuing the excavation of *stûpa* **3** I was fortunate in finding portions of the great railing which encircled its base as well as some more members of the berm and *hti* rails. The ground railing is over eight feet high and its pillars are adorned, on both their inner and outer faces, with a full lotus in the centre and half lotus at the top and bottom, the carving being boldly and precisely executed. On the north and west sides of the *stûpa*, where the rocky ground slopes rapidly away, the foundations of this railing were retained in position by a broad terrace built on its outer side, and at this point I found some of the pillar stumps still *in situ*, the upper part of their shafts being unearthed in the débris round about, while others also were recovered from the platform in front of temple **21**, where they had been used by the mediæval builders as paving stones. This *stûpa* is the one in which Sir A.

Cunningham discovered the body relics of Sariputra and Maha Mogalana,[1] and in view of the special sanctity attaching to this monument as well as the exceptional beauty and interest of the richly carved Gateway on its southern front, I decided to rebuild completely the dome of the *stūpa*, which on the west side was still standing to a height of about five feet above the top of the berm, and to restore the railings and other features with which it was once embellished. A photograph of the *stūpa* in process of reconstruction is reproduced in Plate XIX, *b*; from it the reader will readily appreciate how much the gateway itself will be enhanced by this restoration of the *stūpa* which it adorned and which forms its appropriate background.

Plate XX, *a* exhibits a view of *stūpa* **5** (with the pedestal of a seated Buddha image in front) and of temples **31** and **32** as seen from the vicinity of the Main *stūpa*. Of *stūpa* **5**, which belongs to the mediæval age, only the base is preserved and in this and other similar cases, where restoration is out of the question, I have saved what remains of the structure by doing such structural repairs as are necessary to the masonry and then grassing over the top. Of temple **31** the fabric was in a relatively good condition, and by judiciously dismantling and rebuilding sections of the walls, by re-erecting the leaning columns in the interior, by waterproofing the roof with concrete and repaving the terrace on which it stands, I was able to give it a new and, I believe, a long lease of life. Here also I was fortunate in finding the feet and pedestal of a Naga statue still *in situ* by the side of the temple steps and in discovering near by the rest of the statue, which in Plate XX can be seen re-erected in its original position.

From temple **31** my excavations were carried south along the face of the great retaining wall, which divides the eastern from the main plateau, and at the foot of this wall I exposed the remains of several well-built shrines of the Gupta period besides the roadway, paved with large cobble stones, which at that period led to the monasteries on the eastern part of the site. Further south, again, I also brought to light the plinth of a large shrine approached by steps on its western side directly east of *stūpa* **6**. These remains are visible in Plate XX, *b*, which also shows the charming little Gupta Temple (No. **17** on plan), which I have now roofed over and repaired, as well as the much older temple **22** in the distance.

The exploration of this last mentioned building has been singularly fascinating. In my last Report I described how the early apsidal temple erected here in the Mauryan or Sunga period had been rebuilt on a different plan and with columns of stone instead of timber, about the beginning of the Christian era. During the past season I have extended the limits of my previous digging and now find that the area of the plinth was subsequently enlarged by building out extensions on every side, the method adopted having been to compass the building on every side with massive retaining walls equal in height to the original plinth and then to fill in the space between the walls with heavy blocks of stones thrown in at random. The later retaining wall on the west side is clearly visible in Plate XXI, *a*, which also shows the later steps concealed, like those of the Sonari temple, in the thickness of the wall. On this side, as well presumably as on the east, the extensions were

[1] *Vide* Cunningham, *The Bhilsa Topes*, pp. 297 sqq. and Plate XXII.

relatively narrow, but on the north and south they were carried much further out and followed a somewhat irregular plan.

When planning the preservation of these interesting remains it seemed to me from every point of view desirable to disclose as much as possible of the history of the successive buildings, and accordingly I decided to lay bare the walls of the earlier structure on the west and north sides, where the outer retaining wall is not so well preserved, but to preserve the latter intact on the south and east. In this way the visitor can now see at a glance how the temple has been enlarged and obtain a clearer idea of its appearance at each succeeding stage.

On the eastern plateau my efforts have been mainly directed to the further exploration of temple **21** and to the adequate conservation of the buildings **19** and **20** exposed in the previous year. The temple **21** is a small but well designed shrine in the Aryan style erected about the beginning of the 11th century A.D., and interesting as an example of the influence which Brahmanical ideas were then exerting here as elsewhere on the architecture of the Buddhists. This temple, I discovered, did not, as was previously supposed, stand alone but occupied with its flanking chambers one side of a square courtyard, on the three other sides of which were ranges of monastic cells, the entrance being directly opposite to the front of the shrine and adjacent to the southern side of monastery **20**. But more than this, I found that the temple was built on the remains of an earlier shrine and that, when the reconstruction took place, the monastic cells had also been rebuilt on a higher level and the floor level of the courtyard raised by some three feet, some small shrines of the early Gupta period being partially dismantled for the purpose. As the excavation of this area was still proceeding when the year came to a close, I shall postpone a more detailed description of it to a subsequent report. As regards the conservation of monastery **20** and of the curious structure **19**, I need only say that the open courts in both have been cleared of débris and levelled, fallen columns have been re-erected on their bases, and walls have been repaired in places and rendered water-tight by laying the uppermost courses in mortar and covering them with earth and turf. The photograph reproduced in Plate XXI, *b* shows the monastery **20** in process of repair before its walls have been turfed over. It also shows in the foreground the walls of the monastic cells in front of temple **21** just appearing from the ground and numerous architectural members recovered from the débris.

**Pataliputra.**

Of the excavations at Pataliputra, which are being so generously financed by Mr. Ratan Tata and carried out with such devoted enthusiasm by Dr. Spooner there is, considering the magnitude of the operations, not a great deal to be chronicled. Indeed, Dr. Spooner himself goes so far as to express a regret that a report on them should be necessary at all at the present juncture, seeing that the problems which present themselves are so numerous and perplexing, and that the digging has not yet advanced far enough to enable him to approach them with any degree of confidence. Nevertheless, his deductions and conjectures, though admittedly tentative, are so interesting and suggestive in themselves that I feel reluctant to pass them by in silence. As in the previous year, the efforts of the explorer were mainly concentrated on the great "Hall of columns" at the Kumrahar site, which, judging by such scanty remains as still survive, appeared to him to exhibit a close

resemblance with the famous hall of a hundred columns at Persepolis. This resemblance Dr. Spooner now traces still further in other features and notably in the spacing of the columns, which like the columns at Persepolis are set at a distance of 10 cubits apart, the Indian cubit being the unit of measurement in the one case, the royal cubit of Darius in the other. But Dr. Spooner goes still further than this; from the presence of a number of circular shafts of dark soil in the otherwise red floor of the hall, marking apparently the spots where heavy bodies have sunk into the watery subsoil beneath, and from the discovery, too, of the head of a statue in one of these shafts, he conjectures that numerous statues once stood in the hall and that the hall itself was in fact nothing more nor less than a Persian *talar* divided into three stories, in each of which stood Atlant statues upholding tier upon tier the royal throne above their heads and thus typifying the subject people of the monarch. Such a *talar* is portrayed on the sculptured façade of the tomb of Darius at Persepolis, and another on the portal of the "Hall of a hundred columns" at Persepolis, which Dr. Spooner makes bold to suggest may itself have been constructed on the same plan, namely, as a triple-storied basement supporting a miniature *talar* for the royal throne on its roof. Dr. Spooner's view regarding the design and purpose of the hall at Pataliputra finds some confirmation, he believes, in a clay seal recovered on the site, which depicts just such a three-storied hall as he predicates, surmounted by a somewhat smaller replica of itself. Brilliant and attractive as these theories are, it must be borne in mind that the evidence on which they are based is at present very slender and that the explorer himself does not put them forward as anything more than reasonable conjectures.

The resemblances which Dr. Spooner traces between the remains at Kumrahar and Persepolis, do not end with the "Hall of columns." They extend also to the whole site of Kumrahar, which there is good reason to suppose covers the remains of a group of palace buildings of which the "Hall of columns" is an integral part. Acting on this supposition Dr. Spooner has by careful measurement instituted a comparison between this site and the platform of Persepolis and has demonstrated that the general configuration of the two is surprisingly similar; for not only in its contour does the Kumrahar site resemble the platform at Persepolis, but the positions occupied by the House of Xerxes and the Palace of Darius at Persepolis, are at Kumrahar marked by conspicuous mounds which may be presumed to conceal the ruins of ancient edifices. Indeed, Dr. Spooner finds the likeness of the two so striking, that he is inclined to believe that the palace of Pataliputra was a direct replica of that of Persepolis, and that the small rocky hill with a terrace and cave, which Hiuen Tsang tells us once existed south-west of the old palace, was artificially constructed by the Mauryan emperor Asoka in imitation of the hill containing the royal tombs at Persepolis. Here again, however, it must not be forgotten that the remains of the Mauryan age are buried some 20 feet below the ground level, and that undue importance must not be attached to superficial indications of the surface, which have resulted from deposits made by floods during the last two thousand years or from débris piled up by the ruin of mediæval structures. On the other hand, the points of resemblance between the sites of Kumrahar and Persepolis are so striking that it will be something more than strange if they prove to be the outcome of mere accident.

**Prehistoric cairns at Sirumugai, Madras.**

The excavations described above at Taxila, Besnagar, Sanchi and Pataliputra constitute the main operations of the year, but some digging on a smaller scale has also been carried out in the Southern and Burma Circles. In the Madras Presidency Mr. Longhurst opened a group of cairns near the village of Sirumugai about eight miles to the north-east of Mettupalaiyam railway station. These cairns vary from 6 to 24 feet in diameter and are formed of a ring of boulders enclosing a mound about three feet high of smaller stones; but in some cases the loose stones in the centre have been removed, and only the circle of boulders is left. Of three cairns opened by Mr. Longhurst, each was found to contain a burial urn deposited in the middle of the mound and about 4 feet below the ground level, and in each cairn the urn proved to be of the same size and type and laid in the same position—more or less horizontal, with its mouth turned to the east. The urns are approximately 4 feet high including the lid, and composed of a coarse brown earthenware, imperfectly baked and originally covered inside and out with a black glaze. They are wheel made and devoid of any ornament save a few simple mouldings round the base and neck and round the rim of the lid. On removing the lids the urns were found to be filled with a fine red earth, in which were imbedded human skulls and bones, iron implements, earthenware vessels, beads and stone flakes. One of the skulls was relatively well preserved, but all the other bones were broken into small pieces, and Mr. Longhurst is of opinion that this must have been done before they were thrown into the urns; from the presence of fine earth in the cavities of the skulls and other bones he also deduces that liquid mud was poured into the urns at the time of the burial. This deduction, however, seems scarcely justified; for such earth is usually found in the interior of vessels which have been buried for any great length of time, even when their lids are relatively close fitting, and in many cases at any rate there can be no question that it is due to the slow percolation of mud and water.

Other cairns at Sirumugai were found to contain, instead of burial urns, oblong tombs cut out of the living rock and measuring about 5 feet long by 2 feet wide and 2 feet deep. These tombs, which were without any covers, contained human bones and iron utensils and vessels of similar fabric to those in the urns, but no stone implements. In one of the tomb cairns three four-legged urns were found ranged outside the rock-cut grave, and in each of the urns were some fragments of bone mixed with earth; but in the tomb itself there was no trace of anything besides red earth and gravel.[1] As to the age of this class of cairns, it seems probable that both the urn and tomb cairns are approximately of the same age and there is some reason for referring them both to the early centuries of the Christian era, but the articles found in them are hardly distinctive enough for the establishment of reliable synchronisms, and the age suggested must be regarded as little more than conjectural.

**Shwegugyi and Ajapala pagodas in Burma.**

In Burma, M. Duroiselle devoted a few days to excavations at the Shwegugyi and Ajapala pagodas in the Pegu District. Both of these monuments have fallen to ruin and are now little more than heaps of débris, but their surrounding walls proved on excavation to be adorned with hundreds of niches contain-

[1] For a description of these cairns see the *Annual Report of the Archæological Department, Southern Circle*, 1913-14, pp. 43-45 and Figs. I-VII.

ing admirable terracotta bas-reliefs, numbers of which were found buried in the accumulated débris at the foot of the walls. These reliefs are considered by M. Duroiselle to be the latest examples of really high class terracotta technique in Burma, since the art of terracotta making apparently declined very rapidly after the 5th century A.D. The subjects represented in them relate to two events in the Buddha's life, namely: his fight with Mara (*cf.* Plate XXIII, *b* and *c*) and his temptation by the daughters of Mara (*cf.* Plate XXIII, *d* and *e*). The fight is depicted on the plaques of the Shwegugyi, and the seductions of the three *apsaras* on the plaques of the Ajapala. Apart from their artistic interest and the presence of Talaing inscriptions on twenty of them, an added importance attaches to these bas-reliefs from the fact that the dresses, head-gear, weapons and other features betray not only the strong influence which India was then exerting on Pegu, but the influence also of the Malay Straits, Siam and even Cambodia.

**Museums and minor antiquities.**

The Indian Museum, Calcutta, celebrated its centenary on the 14th of January, 1914, special exhibitions being held and entertainments given in honour of the occasion. The Trustees of the Victoria Memorial vacated the lower gallery of the new wing, which had been lent to them in 1911, and this gallery was restored to the Archæological Section, my report on the working of which is reprinted in Appendix E. With regard to the catalogue raisonné of the prehistoric implements in the Museum, which has been prepared by Mr. Coggin-Brown, I may mention that the collection comprises a great number of palæolithic implements from the Kurnool, Guntur, Nellore, Cuddapah, Chingleput and Arcot Districts in Madras, the Southern Mahratha Country, the valleys of the Godavari and Nerbudda, the Central Provinces and Central India, Rajputana and Bengal, Bihar and Orissa. It comprises also numerous neolithic implements from the North Arcot and Salem districts of Madras, Coorg, Bellary and Anantapur, the United and Central Provinces, Central India, the Indus valley, Baluchistan, Bengal, Bihar and Orissa, Burma, Assam and the Andaman Islands. In addition to these there are a number of specimens from foreign countries. The collection of prehistoric copper weapons has been sorted by Mr. Coggin-Brown and each individual specimen reweighed and remeasured. The catalogue, which is now completed, not only gives a description of every specimen whose history can be traced, but also a detailed summary of the distribution of prehistoric artifacts in each part of the Indian Empire with which it deals. An introduction briefly summarises the present state of prehistoric archæology in India, mainly from the comparative point of view. The labour devoted by Mr. Brown to the examination and detailed description of some thousands of specimens has been vast, but it has been well repaid, and it is a great satisfaction to know that the collection is now systematically arranged and ready to be displayed in the new gallery.

In the Lahore Museum, Mr. R. B. Whitehead's Catalogue of the Græco-Bactrian and Mughal coins has been completed, while the catalogue of Buddhist sculptures, the preparation of which was entrusted to Mr. Hargreaves, is also well advanced. Our thanks are due to Captain Rybot of the 76th Punjabis for classifying, re-arranging and labelling the prehistoric antiquities in this Museum. The Lahore Museum is also to receive on loan the gold and silver objects and other

valuables which I have unearthed at Taxila, but most of the antiquities at that place are being housed in temporary accommodation on the site itself pending a decision as to whether a local museum is to be erected there or the whole collection transferred elsewhere.

In Bombay, the construction of the Prince of Wales Museum is nearly finished and it is hoped that the work of fitting up the archæological galleries will be taken up before long and an Assistant Curator appointed to look after them. In the meantime it is gratifying to note that the few archæological specimens in the Victoria and Albert Museum at Bombay have been re-arranged and a descriptive catalogue of them prepared.

**Fresh Acquisitions.**

The objects acquired for the archæological sections of these museums mainly consisted of sculptures and coins, most of the latter of which were received as presents from Local Governments or Native States. Among other acquisitions the following are noteworthy:—At the Lucknow Museum, some brass images of the later Buddhist and Jaina pantheon, a railing pillar of the early Kushan period, and some relievos of Gupta date; at the Muttra Museum, an inscribed lintel of pre-Kushan date and a few detached heads; at the Sarnath Museum, several Buddhist and Jaina images discovered locally; at the Peshawar Museum, a large number of sculptures excavated by Sir Aurel Stein at Sahri-Bahlol; and at Pagan, a copper casket, a clay votive *stūpa* and some rubies unearthed from the centre of a ruined pagoda in its neighbourhood. The additions to the Madras and Trivendrum museums, consisted in the main of Saivite and Vishnavite images obtained as treasure trove, while those at Nagpur and Rajputana were mostly in the nature of inscriptions of the time of the Kalachuris, the Guhilas and Yadavas. Lastly, to the Delhi Museum and the Mughal Room in the Delhi Fort were added a number of interesting articles consisting of wearing apparel and domestic furniture which once belonged to Bahadur Shah II and Zinat Mahal, the last queen of Delhi, as well as some valuable portraits of warriors and chiefs of the Mughal period.

**Treasure Trove.**

As usual, the majority of the treasure trove finds made during the year consisted of coins. The largest find of all was a hoard of 2,873 punch-marked pieces discovered in an earthenware vessel in the bed of the Kosi river in the Purnea District of Bihar and Orissa. Nearly five hundred of these have already been cleaned by Mr. R. D. Banerji of the Indian Museum, who will contribute a note to my Annual on the entire collection as soon as it has been thoroughly examined. Other noteworthy finds are the following:—(*a*) 48 silver coins, namely, 8 drammas and 40 quarter drammas of the Chandella king Madanavarman, discovered in the village Panwar in the Rewah State, (*b*) 19 rare gold issues belonging to the Chedi king Gangeyadeva, the Chandella princes Kirtivarman, Sallakshanavarman and Madanavarman, the Tomara king Mahipala, and the Gahadavala king Govindachandra.

Of the treasure trove finds other than coins the only ones which deserve mention are some fine copper images of Siva and Vishnu and other deities, which were discovered at Nellore and in the Fort of Vellore in the Madras Presidency.

**Epigraphy.**

**Epigraphia Indica.**

For the following summary of the epigraphical work accomplished during the year I am indebted to Rao Sahib H. Krishna Sastri, Officiating Government

Epigraphist for India. During the year under review three parts of the *Epigraphia Indica, viz.:* Parts VI to VIII of Volume XI, have been issued by Dr. Sten Konow. They include verifications by Mr. R. Sewell of 21 Chola and 22 Pandya dates supplied from Tamil inscriptions by the Assistant Archæological Superintendent for Epigraphy, Southern Circle. The initial date of the Chalukya-Chola king Kulottunga-Chola II has been, for the first time, definitely fixed by Mr. Sewell to be between 26th March and 14th July, A.D. 1133. In a subsequent article on the same subject Diwan Bahadur Swamikannu Pillai has further narrowed down the date to the period May 9th to July 14th, A.D. 1133. Rajanarayanan Samburaya, one of the many petty chieftains, who usurped portions of the Chola dominions in the last days of its existence, is found to have succeeded to the throne between January 3rd and March 25th, A.D. 1339. Among the Pandya dates discussed by Mr. Sewell, we have one from Tiruvellarai, near Trichinopoly, which is very valuable. It fixes the accession of Maranjadaiyar (Varaguna-Maharaja) during the period March 22nd to November 22nd, A.D. 862. This is the only sure date, so far discovered for an early Pandya king. Coming to the mediæval period (*i.e.,* the 12th century A.D. and after) the chronology of the Pandyas is still hazy. Details of dates supplied from inscriptions are often found, on scrutiny, to be very irregular. A few dates, however, which work out correctly, introduce names of new kings not found in the published list of Professor Kielhorn. Jatavarman Kulasekhara, who succeeded to the throne between A.D. 1237 and 1238 and Jatavarman Parakrama-Pandya, whose reign began between 24th March A.D. 1315 and 23rd March 1316, are two such new Pandya kings. Mr. Swamikannu Pillai in an able article contributed to the *Indian Antiquary* (Vol. XLII, pp. 163ff., 221ff.) has devoted special attention to this aspect of the chronology of the mediæval Pandyas, and has discovered about a dozen of such new kings with their initial dates. This number includes also the two Pandya kings discovered by Mr. Sewell.

The origin of the Tibetan alphabet with illustrative plates discussed at great length by Dr. A. H. Francke is another article of much scientific interest. He holds the view that the alphabet must have been quietly worked out in the ancient monasteries of Turkestan long before the 7th century of our era when the Tibetan alphabet is supposed to have originated. From the Dadhimati-mata inscription of the 7th century A.D. published by Pandit Ram Karna, it is proved that the *Devimahatmya* which forms part of the *Markandeyapurana* could not, as supposed by some, be a later interpolation, or at any rate, that it was not produced later than the 7th century A.D.[1] The Malepadu plates of Punyakumara of about the 8th century A.D. are of great interest for the history of Cholas during the period when they were probably subordinate to Pallava supremacy. The plates come from a part of the country which in the time of the Chinese traveller Hiuen Tsang was called Chuliye ; and it is inferred that Punyakumara and others, who were of Chola descent and held the title Chola-Maharaja, must have been rulers of Chuliye under Pallava overlords. Other papers of interest in the parts of the *Epigraphia Indica* so far published, are the Tiwarkhed plates of the Rashtrakuta chief Nannaraja of

[1] Mr. Pargiter discussing this same question in the *Bibliographia Indica* (Calcutta, 1904) says that the *Devimahatmya* was certainly complete in the 9th century and very probably in the 5th or 6th century A.D.

A.D. 632, by Rai Bahadur Hiralal, the Parikud plates of Madhyamarajadeva of about the 11th century A.D.[1] by Mr. R. D. Banerji and the Mannarkovil inscription of Jatavarman Sundara-Chola-Pandya of the same period, by Mr. K. V. Subrahmanya Aiyar. The last belongs to a period of Chola history, when almost the whole of the Pandya empire was under Chola suzerainty and when Chola Governors, under the title Chola-Pandyas, had been appointed by Chola emperors to settle the Pandyas, who were evidently in a state of chronic revolt against the Cholas.

**Epigraphical discoveries.**

In addition to the inscriptions recovered by the Director General at Taxila and Sanchi and referred to elsewhere in this report, the following are the most important epigraphical finds of the year. In the *Frontier Circle* was discovered a small Kharoshthi inscription in two lines on a large marble block in a village in the Swabi Tahsil. Sixty inscriptions found or re-copied in the *Northern Circle* mostly register names of private persons. Some of these refer to land grants, to gifts of sacred utensils or to the erection of pillars and temples. A number relate to the princes of the Chand Dynasty—one from Balesvara recording the setting up of a pillar of fame (*kirti-stambha*) by king Abhayachandra in A.D. 1361. Mr. Hirananda Sastri of the Lucknow Museum reports the find of two votive inscriptions, one dated Samvat, 1216, and engraved on a brass image of Rishabhanatha, and the other dated Samvat, 1652, and cut on a similar image of Parsvanatha.

In the *Burma Circle* the Superintendent, Archæological Survey, has several interesting epigraphical finds to report, numbering in all about seventy-four. Perhaps the most important of them are three votive tablets from Syriam, of the usual Bodh-Gaya type, with the formula "Ye dhamma . . . . ." in the North-Indian characters of the 11-12th century and bearing on the reverse short incriptions in old Talaing. The other inscriptions discovered are of a comparatively recent date, their age varying from the 13th to the 19th century. The language of these epigraphs is either Burmese, Siamese or Talaing.

In the *Western Circle* no less than eighty-seven inscriptions were copied. Some are in Sanskrit, others in Persian and one in the vernacular of Udaipur used in the 11th century A.D. Only a few of the records are new, the rest being either published or more or less known. Fresh impressions of the latter, however, may not be without interest, as they enable us in many cases to correct the old tentative readings. The old name of Bhilsa proves to have been Bhaillasvami ; for in one of the records at Udaipur, about 30 miles north-east of the town, we are told that Udaipur was situated in the Bhaillasvami-mahadvadasaka, *i.e.*, a group of twelve villages of which Bhaillasvami was one. Again, according to a fragmentary inscription originally discovered on the Bhilsa town wall but now no longer traceable, there appears to have been erected a temple to the Sun called Bhaillesa, on the Vetravati (Betwa). The inscriptions on the pillars of the mosque Bija-Mandir, on the outskirts of the town go to prove that the present mosque was originally a Hindu temple consecrated to the goddess Charchika and constructed by a certain Naravarman some time about the 12th century A.D. Rather curious is an epigraph on an

[1] Wrongly ascribed by the author to the 7th century A.D.

old temple basement which specifies the respective maximum ages to which various domesticated quadrupeds, like thehorse, the donkey, the elephant, etc., reach. Interesting, also, is an inscription in the porch of the Nilakanthesvara temple at Udaipur which credits Udayaditya with having established the Udayapura (town), the Udeyesvara (temple) and the Udayasamudra (tank). It may be observed that various minor epigraphs engraved on the reliefs and sculptures of the ruins of different temples, left unnoticed by other explorers, have been very usefully employed by Mr. D. R. Bhandarkar to explain iconographical repesentations.

The *Southern Circle* has yielded, as usual, a plentiful harvest, the total number of inscriptions transcribed being 438. A dozen copper-plate grants collected and examined during the season add considerably to our knowledge of the Western Gangas, the Pallavas, the Vishnukundins and the Eastern Chalukyas. Mr. Swamikannu Pillai deserves the thanks of all students of South-Indian Epigraphy for having voluntarily undertaken the task, involving the most complicated computations, of supplying the Department with calculations of the astronomical details of dates found in the inscriptions, the results of which are appended in a tabular form in appendices D and E to the Epigraphical report of the Southern Presidency. The 93 reliefs on the *gopura* of the Chidambaram temple (probably of the 13th century A.D.) illustrating the chapter dealing with the Art of Dancing as described in the *Bharatiya-natyasastra* afford much help towards the proper understanding of this difficult subject.

Among the copper-plate grants noticed, there is one of Vijaya-Vishnugopavarman of the 7th century A.D. which will very probably bridge over a gap in the Pallava chronology. In another, belonging to the Western Ganga king Madhava-Mahadhiraja II (Simhavarman), it is mentioned that, of the founders of the dynasty, two, who are related to each other as father and son, were installed on the throne by contemporary Pallava kings. This synchronism is invaluable, inasmuch as our present knowledge of the chronology of the Pallavas is defective and that of the Western Gangas is seriously disputed.

A stone inscription from the Bellary district gives the year 966 A.D. as the year of the death of the Rashtrakuta king Krishna III, and relates that after him Khottigadeva succeeded to the throne in the very same year. From some records of the Western Chalukya kings of Kalyani we infer that the ancient Nolamba-Pallava country (which was almost identical with the modern Bellary district) must have been at the time of Jayasimha II and Somesvara I, already absorbed into the Chalukya dominions.

From the copper-plates of the Eastern Chalukyas may be singled out one of Vishnuvardhana III, as this is the first record, so far discovered, of that king, as well as another which gives a circumstantial description of the heroic death of a son of king Chalukya-Bhima I on the battlefield of Niravadyapura.

The Pandya inscriptions add two more names to the list of the ruling princes, *viz.*, Kulasekhara or Jatavarman-Kulasekhara II, who, according to Mr. Swamikannu Pillai, ascended the throne in A.D. 1237, and Bhuvanekavira Vikrama-Pandya, who was a younger contemporary of the Kakatiya king Ganapati. Two queens regnant of the Kakatiya dynasty had assumed the titles Mahamandalesvara

and Rudradeva-Maharaja, which can, indeed with propriety, apply only to persons of the male sex.

An interesting inscription of the time of the Bahmani King, Muhammad Shah II, records a grant of Masnad-Eli-Kutumana-Malka-Odaya, which enables us to identify the donor with Malik Qutb-ul-mulk, who founded the Qutb-Shahi dynasty of Golkonda, under the title Sultan Quli-Qutb-Shah. Another Muhammadan record in Sanskrit coming from the Ganjam district and dated in 1590-1 A.D. deserves also to be mentioned here. It registers the foundation of a tank by a general of king Muhammad Quli-Qutb-Shah of Golkonda (1581-1611 A.D.) in the name of Singabhupala or Narasimha, who was then ruling over the Utkala kingdom, comprising Rajamahendri, Kalinga and Surashtra.

**Moslem Inscriptions.**

During the greater part of the year under review the Government Epigraphist for Moslem Inscriptions was occupied in working up materials for the Epigraphia Indo-Moslemica, 1911-12, and in seeing it through the press. The next issue of this publication will contain all the inscriptions that are known of the successors of Altamish and of the Khalji kings, and for this purpose Mr. Zafar Hasan, B.A., was deputed to visit Manglaur, Garhmuktesar, Budaon, Sahswan, Alapur, Sakit, Rapri and Shamsabad and procure impressions of the records in those places. Mr. Muhammad Hamid was also sent to take impressions at Panipat, Rohtak, Hansi, Barwala and Jalali. Most of the inscriptions at these places belong to Balban and Alau-d-Din Khalji, a few to Mahmud, Masud and Kaiqubad, and one to Bahram.

No inscriptions have yet been discovered belonging to the reigns of Sultana Raziyya Begam or of the predecessor or successors of Alau-d-Din Khalji. Other records required for the forthcoming number of the Epigraphia Indo-Moslemica are at Vishalgarh,' Cambay, Bihar and Monghyr, but arrangements have not yet been made for securing copies of them.

Impressions of two important inscriptionsf rom Vinukonda and Malkapuram belonging to the Qutb-Shahi dynasty of the Deccan were received from Mr. Krishna Sastri. One of these records a victory gained by Malik Qutbu-l-Mulk over the infidels and the donation of the income of certain villages for the maintenance of a *langar* or almshouse in the name of Khwaja Khizr. A request is made to all to maintain the *langar* in perpetuity and the author invokes a curse on the heads of those who fail to do so. Mr. Krishna Shastri also sent photographs of two inscriptions from the Raichur and the Parenda forts, the former of which records the erection of a tower named Fath Burj during the reign of the Bahmani King Mahmud Shah II (887-924 A.H). The only other circles in which any Moslem inscriptions were copied during the year were the Western and Northern. In the former Mr. Bhandarkar found six Persian inscriptions in some mosques at Bhilsa and Gayaraspur belonging to the reign of Mahmud Khalji I of Malwa (839-880 A.H.). In the Northern Circle 108 Moslem inscriptions were discovered in the Delhi District, 78 being from Delhi proper (Shahjahanabad). All these inscriptions are later than Akbar and mostly of the 18th or 19th century, a number of them being epitaphs inscribed on ancient tombs in recent times.

**Tours.**

The tours of the Provincial Superintendents are described in detail in their respective Annual Reports, and it is unnecessary for me to chronicle their movements

again. In the course of my own cold weather tour I visited the following places :—Taxila, Mankiyala, Mardan, Peshawar, Sanchi, Delhi, Bankipore, Calcutta, Sarnath and Agra. At Sanchi I was encamped for a period of seven weeks, and for an equal period at Taxila in order to conduct the extensive works of excavation and repair which were in progress at both places.

**Publications.**

The following publications were issued during the year :—

(1) Annual Reports for the Southern, Western, Eastern, Northern, Frontier and Burma Circles as well as the Epigraphical Report of the Assistant Archæological Superintendent, Southern Circle, for the year 1913-14; (2) Annual Report of the Archæological Section, Indian Museum, Calcutta, for the year 1912-13, and (3) Epigraphia Indica, Vol. X, Parts 7 and 8; and Vol. XI, Parts 4 to 6.

**Library.**

Eight hundred and sixty-eight new volumes, including periodicals, were added to the library, of which 269 were obtained in exchange for our own publications and 343 were presents. Of the new accessions the following may be mentioned :—*Vedic Index of names and subjects* by Macdonell and Keith, *Ideals of Indian Art* by Havell, *Encyclopædia of Religion and Ethics*, Volume 5, *Encyclopædia of Islam*, No. 17, *Reports of the British School of Archæology* for the year 1911 and 1913, *Jaina Granthamala Series*, 36 volumes, *Indian Architecture* by Havell, and *Roman Sculpture from Augustus to Constantine* by A. Strong.

**Photographs.**

A list of photographic negatives prepared during the year is published as Appendix D at the end of this Report. Three hundred and sixty-six prints were sold to the public and a sum of Rs. 151-9-0 was realised from the sale.

**Personnel.**

Mr. A. Rea, Superintendent of the Southern Circle, retired from Government Service and made over charge of his office to Mr. A. H. Longhurst on the 17th October 1913. The latter took one month's privilege leave in July 1913. Mr. D. R. Bhandarkar was confirmed in the post of the Superintendent, Western Circle. He availed himself of privilege leave for 23 days in October 1913. The post of the Government Epigraphist remained vacant. Mr. H. Krishna Sastri, Assistant Archæological Superintendent for Epigraphy, Southern Circle, held charge of the current duties of the office, and Professor Sten Konow, Ph.D., remained Editor of the *Epigraphia Indica*. Dr. J. Ph. Vogel having been permitted to resign his appointment as Superintendent, Hindu and Buddhist Monuments, in February 1914, Mr. H. Hargreaves was confirmed in this appointment in March, 1914. The head-quarters of the Superintendent, Eastern Circle, were transferred from Bankipore to Calcutta, where he holds the post of Officer-in-charge of the Archæological Section of the Indian Museum in addition to his own duties. The Assistant Superintendent, Mr. J. F. Blakiston, was granted privilege leave for a fortnight at the end of September, 1913. Maulvi Zafar Hasan was appointed Assistant Superintendent in the Northern Circle on 17th June, 1913, for a term of one year for the purpose of listing the monuments in the new Province of Delhi. Sir Aurel Stein left for Central Asia on 14th June, 1913, on a new journey of exploration, and the current duties of the office of the Frontier Circle were held by his Indian Assistant, Khan Sahib Mian Wasi-ud-Din.

**Scholarships.**

Archæological scholarships were held by Maulvi Zafar Hasan, B.A., M. B. Garde, B.A., H. Panday, B.A., and K. N. Dikshit, M.A. Maulvi Zafar Hasan

having been appointed Assistant Superintendent in the Northern Circle, his scholarship was given to Muhammad Hamid, B.A., of the Islamia College, Lahore. Mr. M. B. Garde was appointed Inspector of Archæology in the Gwalior State and left the Department on the 18th October, 1913. Babu Banarsi Das, B.A., of the Oriental College, Lahore, was recruited to fill up his place. In Burma the archæological scholarship instituted by the Local Government was made more attractive by raising its value from Rs. 100 to Rs. 150 in the first year and to Rs. 175 in the second.

JOHN MARSHALL,
*Director General of Archæology.*

## APPENDIX A.

*Special grant-in-aid.*—The following allotments were made out of the special grant of Rs. 1,05,400 provided by the Government of India:—

| | R |
|---|---|
| Madras | 8,000 |
| Bombay | 8,000 |
| United Provinces | 8,000 |
| Punjab | 14,715 |
| Burma | 8,000 |
| North-West Frontier Province | 4,000 |
| Delhi | 8,000 |
| Exploration and conservation | 27,385 |
| Archæological Library, Simla | 4,000 |
| Purchase of antiquities | 7,000 |
| Honorarium for the catalogue of Prehistoric Antiquities in the Indian Museum | 500 |
| Monograph on the Loan Exhibition, Delhi | 5,400 |
| Deputation of Dr. Francke | 900 |
| Magic Lantern | 200 |
| Copying frescoes in Jogimara cave, Surguja State, Central Provinces | 1,300 |
| TOTAL | 1,05,400 |

## APPENDIX B.

*Expenditure on the Archæological Department for the year 1913-14.*

| | | R |
|---|---|---|
| Southern Circle | Archæology | 25,250 |
| | Epigraphy | 16,858 |
| Western Circle | | 24,732 |
| Eastern Circle | | 38,569 |
| Northern Circle | Superintendent, Hindu and Buddhist monuments | 16,930 |
| | Superintendent, Muhammadan and British monuments | 23,126 |
| Frontier Circle | | 16,317 |
| Burma Circle | | 24,818 |
| Director General of Archæology (including Government Epigraphist for India and the Epigraphist for Moslem Inscriptions) | | 64,900 |
| TOTAL | | 2,51,500 |

*Expenditure on conservation, excavation, etc., including grants-in-aid from Imperial Revenues.*

| | | R |
|---|---|---|
| Madras | | 33,133 |
| Bombay | | 32,070 |
| Bengal | | 16,772 |
| Bihar and Orissa | | 19,862 |
| Central Provinces | | 13,264 |
| Assam | | 8,128 |
| United Provinces | Hindu and Buddhist monuments | 1,072 |
| | Muhammadan and British monuments | 60,513 |

## APPENDIX B—*contd.*

| | | R |
|---|---|---|
| Punjab | Hindu and Buddhist monuments | 3,870 |
| | Muhammadan and British monuments | 51,607 |
| Delhi | | 107,743 |
| Burma | | 29,202 |
| North-West Frontier Province | | 4,000 |
| Excavations | | 27,385 |
| Indore Durbar | | 542 |
| *Hyderabad (Deccan) | | 27,346 |
| Antiquities purchased | | 4,000 |
| Library | | 3,343 |
| Honorarium paid | | 500 |
| Monograph on Loan Exhibition, Delhi | | 4,270 |
| Deputation of Dr. Francke | | 900 |
| Magic lantern | | 200 |
| Copying frescoes in the Jogimara cave, Sirguja State, Central Provinces | | 1,315 |
| Director General's Annual Report | | 4,637 |
| Epigraphia Indica and Epigraphia Indo-Moslemica | | 2,058 |
| Other Archæological Publications | | 2,656 |
| | | 4,60,388 |

* Expenditure from October 1912 to October 1913.

## APPENDIX C.

*Drawings and Photographs prepared by the Department.*

### DRAWINGS.

| | | |
|---|---|---|
| Southern Circle | Archæology | 2 |
| | Epigraphy | *Nil.* |
| Western Circle | | 8 |
| Eastern Circle | | 4 |
| Northern Circle | Superintendent, Hindu and Buddhist Monuments | 11 |
| | Superintendent, Muhammadan and British Monuments | 14 |
| Burma Circle | | 15 |
| Frontier Circle | | 2 |
| Director General of Archæology | | 18 |
| | | 74 |

### PHOTOGRAPHS.

| | | |
|---|---|---|
| Southern Circle | Archæology | 110 |
| | Epigraphy | 24 |
| Western Circle | | 204 |
| Eastern Circle | | 126 |
| Northern Circle | Superintendent, Hindu and Buddhist monuments | 125 |
| | Superintendent, Muhammadan and British monuments | 417 |
| Burma Circle | | 135 |
| Frontier Circle | | 69 |
| Director General of Archæology | | 296 |
| | TOTAL | 1,506 |

## APPENDIX D.

*List of photographic negatives prepared by the Office of the Director General of Archæology in India during the year 1913-14.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 1 | Sanchi. | General view of hill from N. W. . . . . . | 12″ × 10″ |
| 2 | " | Ditto ditto ditto . . . . . | " |
| 3 | " | General view of hill . . . . . . . . . | " |
| 4 | " | General view of hill-top from S. W. . . . . | 8½″ × 6½″ |
| 5 | " | Stūpa 1, general view from N. W. . . . . . | 12″ × 10″ |
| 6 | " | " 1, detail view from N. W. . . . . | 8½″ × 6½″ |
| 7 | " | " 1, general view from S. W. . . . . | 12″ × 10″ |
| 7a | " | General view of excavations, from No. 21 to 31 from S. | " |
| 8 | " | Panoramic view of Stūpa 1 from S. . . . . | 8½″ × 6½″ |
| 9 | " | Ditto ditto ditto . . . . . | " |
| 10 and 11 | " | General view of the buildings from S. . . . . | " |
| 12 | " | Ditto Stūpa 1, Stūpa 7 and Temples 17 and 18, from S. . . . . . . . . . | " |
| 13 | " | Stūpa 1, from S. E. . . . . . . . . | " |
| 14 | " | " 1, detail view from N. E. . . . . . . | " |
| 15 | " | " 1, detail view from north-east corner, with the gateway of Stûpa 3 . . . . . . . | " |
| 16 | " | Seated Buddha on north side of Stūpa 1 . . . | " |
| 17 | " | " " on east side of Stūpa 1 . . . | " |
| 18 | " | " " on south side of Stūpa 1 . . . | " |
| 19 | " | " " on south side of Stūpa 1 (broken) . . | " |
| 20 | " | Standing statue of Buddha . . . . . . | " |
| 21 | " | Image in *pradakshina* of Main Stūpa opposite west gateway . . . . . . . . . . | " |
| 22 | " | Asoka column *in situ* . . . . . . . | " |
| 23 | " | Lion Capital of Asoka column . . . . . . | " |
| 24 | " | Ditto ditto ditto . . . . . . | " |
| 25 | " | Gupta pillar from south . . . . . . . | " |

APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 26 | Sanchi. | Stūpa 1, berm railing . . . . . . | 8½″ × 6½″ |
| 27 | ,, | Ditto Stairway railing . . . . . . | ,, |
| 28 | ,, | Ditto ditto . . . . . . . | ,, |
| 29 | ,, | Ditto ditto . . . . . . . | ,, |
| 30 | ,, | Ditto ditto . . . . . . . | ,, |
| 31 | ,, | Fragment from south gateway . . . . . | ,, |
| 32 | ,, | Carved baluster pillar from gateway of Main Stūpa . | ,, |
| 33 | ,, | General view of south gateway and temples 18 and 22 . | ,, |
| 34 | ,, | Standing image of Bodhisattva . . . . . | ,, |
| 35 | ,, | Ditto ditto . . . . . | ,, |
| 36 | ,, | Stūpa 2, general view from N. E. . . . . | 12″ × 10″ |
| 37 | ,, | Ditto ditto from E. . . . . . . | ,, |
| 38 | ,, | Ditto ditto from N. . . . . . | 8½″ × 6¾″ |
| 39 | ,, | Ditto ditto . . . . . | ,, |
| 40 | ,, | Ditto railing pillar No. 5, W. and N. face . . | ,, |
| 41 | ,, | Ditto railing pillar . . . . . . . | ,, |
| 42 | ,, | Gupta pillar found near Stūpa 2 . . . . . . | ,, |
| 43 | ,, | Stūpa 2, lion capital, left side . . . . . | 6½″ × 4¾″ |
| 44 | ,, | Ditto ditto, front view . . . . . | ,, |
| 45 | ,, | Ditto ditto, right side . . . . . . | ,, |
| 46 | ,, | Stūpa 3, general view from S. W. . . . . | 12″ × 10″ |
| 47 | ,, | Ditto ditto . . . . . | ,, |
| 48 | ,, | Ditto ditto from S. . . . . . | ,, |
| 49 | ,, | General view of Stūpas 3 and 4 from N. W. . . | 8½″ × 6½″ |
| 50 | ,, | Stūpa 3, general view from S. W. . . . . | ,, |
| 51 | ,, | Ditto general view from S. W. . . . . . | ,, |
| 52 | ,, | Ditto berm railings . . . . . . | ,, |
| 53 | ,, | Ditto railing pillars . . . . . . | ,, |
| 54 | ,, | Coping found near Stūpa 3 . . . | ,, |

Appendix D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 55 | Sanchi. | Lion Capital . . . . . . . . | $8\frac{1}{2}'' \times 6\frac{1}{2}''$ |
| 56 | ,, | Lion Capital of Gupta pillar . . . . . | ,, |
| 57 | ,, | Gupta Temple No. 17 from N.-E. . . . . | $12'' \times 10''$ |
| 58 | ,, | Portion of carved frieze . . . . . . | ,, |
| 59 | ,, | Temple 18 from N.-W. . . . . . . | ,, |
| 60 | ,, | ,, from N.-E. . . . . . . . | ,, |
| 61 | ,, | ,, from W. . . . . . . . | $8\frac{1}{2}'' \times 6\frac{1}{2}''$ |
| 62 | ,, | ,, east door-jamb . . . . . . | ,, |
| 63 | ,, | Carved door-jamb, detached . . . . . | ,, |
| 64 | ,, | Temple 19 : general view from N.-E. . . . . | ,, |
| 65 | ,, | General view of Temples Nos. 22 and 17 from N. . . | ,, |
| 66 | ,, | Ditto ditto ditto . . | $12'' \times 10''$ |
| 67 | ,, | Monastery 20 : north wing from S.-W. . . | ,, |
| 68 | ,, | ,, general view from S.-E. . . . . | ,, |
| 69 | ,, | ,, Interior of north wing from E. . . | $8\frac{1}{2}'' \times 6\frac{1}{2}''$ |
| 70 | ,, | Temple 21 : general view from W. . . . . | $12'' \times 10''$ |
| 71 | ,, | ,, doorway in wing from W. . . . . | ,, |
| 72 | ,, | ,, statue in interior . . . . . . | $8\frac{1}{2}'' \times 6\frac{1}{2}''$ |
| 73 | ,, | Doorway lintel from débris in front of Temple No. 21 . | ,, |
| 74 | ,, | Temple 21 : plinth from S.-W. . . . . . | ,, |
| 75 | ,, | ,, from S. . . . . . . . . | ,, |
| 76 | ,, | ,, seated Buddha in S. wing . . . . . | ,, |
| 77 | ,, | ,, amalaka and finial . . . . . . | ,, |
| 78 | ,, | ,, doorway lintel, detached . . . . . | ,, |
| 79 | ,, | ,, fragments of sikhara . . . . . | ,, |
| 80 | ,, | ,, ,, ,, . . . . . | ,, |
| 81 | ,, | ,, ,, ,, . . . . . | ,, |
| 82 | ,, | Carved pottery from building No. 19 . . . | $6\frac{1}{2}'' \times 4\frac{3}{4}''$ |
| 83 | ,, | Temple 22 : general view from N.-W. . . . . | $12'' \times 10''$ |
| 84 | ,, | Ditto ditto . . . . | ,, |

APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 85 | Sanchi. | Temple 22 : detail view from N.-W. | 12″ × 10″ |
| 86 | ,, | ,, detail view from N.-E. | ,, |
| 87-88 | ,, | ,, general view | 8½″ × 6½″ |
| 89 | ,, | ,, detail view from N.-E. | ,, |
| 90 | ,, | ,, general view from S. | ,, |
| 91 | ,, | General view of Temple No. 18 and Stūpa 3 from S.-E. | 6½″ × 4¾″ |
| 92 | ,, | Stone elephant in Temple No. 22 | 8½″ × 6½″ |
| 93 | ,, | Ditto ditto | ,, |
| 94 | ,, | Temple 31 : image of Buddha | ,, |
| 95 | ,, | ,, general view from S.-W. | 12″ × 10″ |
| 96 | ,, | Figure of Nagi in front of Temple 31 | 8½″ × 6½″ |
| 97 | ,, | Image of Mahishamardini | ,, |
| 98 | ,, | Torso of Buddha statue, detached | ,, |
| 99 | ,, | Headless Bodhisattva statue | ,, |
| 100 | ,, | Lion lying south of Madagan | ,, |
| 101 | ,, | Pieces of carved stone | ,, |
| 102 | Nagauri. | Nagababa | ,, |
| 103 | ,, | ,, | ,, |
| 104 | ,, | Female statue (Nagi ?) | ,, |
| 105 | ,, | Ditto ditto | ,, |
| 106 | ,, | Stone horse | ,, |
| 107 | Taxila : Sirkap. | General view of excavations from S. | ,, |
| 108 | ,, | ,, ,, from N. | ,, |
| 109 | ,, | Ditto ditto | 6½″ × 4¾″ |
| 110 | ,, | General view of building D. from S.-W. | 8½″ × 6½″ |
| 111 | ,, | ,, of building E. from N.-W. | ,, |
| 112 | ,, | ,, ,, F. and G. and Shrine No. 1 | ,, |
| 113 | ,, | ,, of building G. and small street between F. and G. | ,, |
| 114 | ,, | General view of excavations from N.-W. | ,, |

APPENDIX D—*contd.*

| No | Place. | Subject. | Size. |
|---|---|---|---|
| 115 | Taxila : Sirkap. | General view of excavations from N.-W. . . . | 8½″ × 6½″ |
| 116 | „ | View of buildings F. and G. with side street . . . | „ |
| 117 | „ | General view of building P. from S.-W. . . . | „ |
| 118 | „ | View of main shrine and surrounding buildings . . | „ |
| 119 | „ | Main shrine and surrounding buildings after repair from W. . . . . . . . . | 6½″ × 4¾″ |
| 120 | „ | Shrine 1 : before repair, front view . . . . | „ |
| 121 | „ | Ditto ditto . . . . . . . | „ |
| 122 | „ | Ditto after repair, ditto . . . . | 8½″ × 6½″ |
| 123 | „ | Shrine 2 : ditto ditto . . . . | „ |
| 124 | „ | Ditto ditto ditto . . . . | 6½″ × 4¾″ |
| 125 | „ | Stucco head (S. K. 2027) . . . . . | 8½″ × 6½″ |
| 126 | „ | Ditto . . . . . . | 6½″ × 4¾″ |
| 127 | „ | Stucco head (S. K. 2021) . . . . . . | „ |
| 128 | „ | Ditto . . . . . . | „ |
| 129 | „ | Stucco head (S. K. 2021) . . . . . | „ |
| 130 | „ | Ditto . . . . . . | „ |
| 131 | „ | Stucco head (S. K. 2026) . . . . . | „ |
| 132 | „ | Ditto . . . . . . | „ |
| 133 | „ | Stucco head (S. K. 2080) . . . . . | 8½″ × 6½″ |
| 134 | „ | Ditto . . . . . . | 6½″ × 4¾″ |
| 135 | „ | Stucco head (S. K. 2150) . . . . . | „ |
| 136 | „ | Ditto . . . . . . | „ |
| 137 | „ | Stucco head (S. K. 2006) . . . . . | „ |
| 138 | „ | Stucco head (S.K. 2107) . . . . . | „ |
| 139 | „ | Stucco head (S. K. 2034) . . . . . | „ |
| 140 | „ | Stucco head (S. K. 2154) . . . . . | „ |
| 141 | „ | Stucco head (S. K. 2007) . . . . . | „ |
| 142 | „ | Stucco head (S. K. 2043) . . . . . | „ |
| 143 | „ | Stucco head (S. K. 2105) . . . . . | 8½″ × 6½″ |

APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 144 | Taxila : Sirkap. | Inscribed copper seals (S. K. 1301 and 2019) | 6½″ × 4¾″ |
| 145 | „ | Stone dish | 8½″ × 6½″ |
| 146 | „ | Ditto | „ |
| 147 | „ | Stone dishes, decorated (S. K. 1836, 1087) | 6½″ × 4¾″ |
| 148 | „ | Ditto (S. K. 1215, 1332) | „ |
| 149 | „ | Stone lamp (S. K. 1094) | „ |
| 150 | „ | Terracotta pillar | 8½″ × 6½″ |
| 151 | „ | Copper vase (S. K. 1287, E. I.) | „ |
| 152 | „ | Ditto (S. K. 1287, E. I.) | „ |
| 153 | „ | Copper cup (S. K. 1287) | 6½″ × 4¾″ |
| 154 | „ | Copper lamp and two vessels, 1015 | „ |
| 155 | „ | Ivory pendant | 8½″ × 6½″ |
| 156 | „ | Silver bust of Dionysus | „ |
| 157-161 | „ | Ditto | 6½″ × 4¾″ |
| 162 | „ | Silver stand of above | „ |
| 163 | „ | Silver spoon | 8½″ × 6½″ |
| 164 | „ | Jewellery : bracelets | „ |
| 165 | „ | „ pendants and rings, etc. | „ |
| 166 | „ | „ chain, etc. | „ |
| 167 | „ | „ Aphrodite, chain, etc. | „ |
| 168 | „ | Silver plate (S. K. 135) | 6½″ × 4¾″ |
| 169-172 | „ | Bronze statue of child, before cleaning | „ |
| 173-175 | „ | „ after cleaning | „ |
| 176 | „ | Stone casket, bead and three small gold caskets | 8½″ × 2½″ |
| 177 | „ | Stone dish (S. K. 198) | 6½″ × 4¾″ |
| 178 | „ | 2 copper spoons and lead rod (S. K. 1245, 621 and 1224) | „ |
| 179 | „ | Stone casket (S. K. 201) | „ |
| 180 | „ | Stone casket (S. K. 50, 291 and 201) | „ |
| 181 | „ | Miscellaneous objects (S. K. 2106, 17, 52, 1121 and 1345) | „ |

APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 182 | Taxila : Sirkap. | Iron helmet (S. K. 126) . . . . . . . | 6¼″ × 4¾″ |
| 183 | " | Iron axe (S. K. 269) . . . . . . . | " |
| 184 | " | Stone caskets and lids of caskets (S. K. 104, 2017, 148, 588). | " |
| 185 | " | Stone casket . . . . . . . . | " |
| 186 | " | " without lid (S. K. 179) . . . . | " |
| 187 | " | Piece of wood carving (S. K. 472) . . . . | " |
| 188 | " | Copper piece (S. K. 473) . . . . . . | " |
| 189 | " | Pottery (S. K. 181-E) . . . . . . | " |
| 190 | " | " (S. K. 104) . . . . . . . | " |
| 191 | " | Double-handled earthen jug (S. K. 511) . . . | " |
| 192 | " | Iron helmet (found in 1913) . . . . . | " |
| 193 | " | Copper cup (S. S. K. 111) . . . . . . | " |
| 194 | " | " objects (S. K. 123, 1303, 1330, 1223, 125d, 186, 572, 1295, 1019). | " |
| 195 | " | Copper objects (S. K. 101, 603, 97, 1299, 24, 1281, 215, 335, 81, 2141, 80, 550). | " |
| 196 | " | Copper objects (S. K. 1310, S. S. K. 10, S. K. 1105, 1283, 331, 149, 1145, 566, 21, 529, 2032, 2057, 1326, 1175). | " |
| 197 | " | Stucco head (S. K. 2008) . . . . . . | " |
| 198 | " | " " " . . . . . . . | " |
| 199 | " | Dies for forging coins (S. K. C. 9) . . . . | " |
| 200 | " | " and terracotta seal (C. 11) . . . . . | " |
| 201 | Bir Mound. | Jewellery . . . . . . . . . | " |
| 202 | Jandial. | Front view of temple . . . . . . | 8½″ × 6½″ |
| 203 | " | " " " . . . . . . . | " |
| 204 | " | Distant view of same from S. . . . . . | 6¼″ × 4¾″ |
| 205 | " | Round stûpa, front view from S. . . . . | 8½″ × 6½″ |
| 206 | " | Terracotta model of temple (J. 43) . . . . | 6¼″ × 4¾″ |
| 207 | Dharmarajika Stûpa. | Main stûpa, general view from S.-W. . . . | 8½″ × 6½″ |

## APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 208 | Dharmarajika Stûpa. | Main Stûpa, general view from S.-W. . . . | 8½″ × 6½″ |
| 209 | ” | ” ” ” ” S.-E. . . . . . | ” |
| 210 | ” | ” ” ” ” E. . . . . | 6½″ × 4¾″ |
| 211 | ” | Detail view of niches on the E. side of main stûpa . . | ” |
| 212 | ” | Main Stûpa, general view from N.-E. . . . | 8½″ × 6½″ |
| 213 | ” | ” ” ” ” . . . . | ” |
| 214 | ” | ” ” ” ” . . . . | ” |
| 215 | ” | ” ” ” ” N. . . . . . | ” |
| 216 | ” | Stûpas P² and P⁶, general view . . . . | 6½″ × 4¾″ |
| 217 | ” | ” ” ” ” . . . . | ” |
| 218 | ” | Stûpa D³, detail view . . . . . . . | 8½″ × 6½″ |
| 219 | ” | ” J, general view . . . . . . . | ” |
| 220 | ” | Stone statue of standing Buddha . . . . | ” |
| 221 | ” | ” ” ” . . . . | ” |
| 222 | ” | ” ” ” . . . . | ” |
| 223 | ” | ” ” Bodhisattva . . . . . | ” |
| 224 | ” | ” ” ” . . . . . | 6½″ × 4¾″ |
| 225 | ” | ” ” ” . . . . . | ” |
| 226 | ” | Buddha preaching (2286 of 1913) . . . . . | 8½″ × 6½″ |
| 227 | ” | ” turning the wheel of the Law . . . . . | ” |
| 228 | ” | Stone sculpture (772) . . . . . . | ” |
| 229 | ” | ” ” ” . . . . . . . | ” |
| 230 | ” | ” relief of female musician . . . . . . | ” |
| 231 | ” | ” ” Gautama's archery contest . . . | 6½″ × 4¾″ |
| 232 | ” | Relief fragment (1246 of 1913) . . . . . | ” |
| 233 | ” | Standing figure in relief . . . . . . . | ” |
| 234 | ” | ” ” (1246 of 1913) . . . . . | ” |
| 235 | ” | Stone heads (1834, 1361) . . . . . . | ” |
| 236 | ” | ” (396) . . . . . . . . . | ” |

APPENDIX D—*contd.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 237 | Dharmarajika Stûpa. | Stone sculptures (1012, 144, 1128) . . . . | 6½″ × 4¾″ |
| 238 | ,, | ,, heads (Nos. 2340, 183) . . . . . . | ,, |
| 239 | ,, | ,, objects (1164, 671, 1364, 1238) . . . . | ,, |
| 240 | ,, | ,, relic casket and two small gold caskets . . . | 8½″ × 6½″ |
| 241 | ,, | ,, ,, ,, a small gold casket . . . | ,, |
| 242 | ,, | ,, lamps (1087) . . . . . . . . | 6½″ × 4¾″ |
| 243 | ,, | Inscribed stone . . . . . . . | ,, |
| 244 | ,, | ,, ,, . . . . . . . . | ,, |
| 245 | ,, | ,, ,, (593 B) . . . . . . | ,, |
| 246 | ,, | ,, ,, (784) . . . . . . | ,, |
| 247 | ,, | Corinthian capital with seated Buddha . . . . | 8½″ × 6½″ |
| 248 | ,, | ,, ,, . . . . . . . . | ,, |
| 249 | ,, | Carved stone jamb . . . . . . . . | ,, |
| 250 | ,, | Two stone heads . . . . . . . . | 6½″ × 4¾″ |
| 251 | ,, | Stone statue (277) . . . . . . . . | ,, |
| 252 | ,, | Stucco head of lion . . . . . . . | ,, |
| 253 | ,, | ,, (No. 49) . . . . . . . . | ,, |
| 254 | ,, | Stone bracket with 4 lions . . . . . . | ,, |
| 255 | ,, | Stucco head (189) . . . . . . . . | ,, |
| 256 | ,, | Ditto . . . . . . . . | ,, |
| 257 | ,, | Stucco fragment (1536) . . . . . . | ,, |
| 258 | ,, | Ditto . . . . . . . . | ,, |
| 259 | ,, | Stucco head . . . . . . . . | ,, |
| 260 | ,, | Ditto . . . . . . . . | ,, |
| 261 | ,, | Ditto . . . . . . . . | ,, |
| 262 | ,, | Ditto . . . . . . . . | ,, |
| 263 | ,, | Ditto . . . . . . . . | ,, |
| 264 | ,, | Ditto . . . . . . . . | 8½″ × 6½″ |

APPENDIX D—*contd.*

| No. | Place. | Subject | Size. |
|---|---|---|---|
| 265 | Dharmarajika Stūpa. | Stucco head (1614) . . . . . . | 6½" × 4¾" |
| 266 | " | Ditto (1613) . . . . | " |
| 267 | " | Ditto (885) . . . . | " |
| 268 | " | Ditto . . . . . . . | 8½" × 6½" |
| 269 | " | Ditto (613) . . . . . | 6½" × 4¾" |
| 270 | " | Ditto (267) . . . . | " |
| 271 | " | Terracotta head . . . . . . . | " |
| 272 | " | Stucco head (1393) . . . . . . | " |
| 273 | " | Terracotta head (543) . . . . . . | 8½" × 6½" |
| 274 | " | Ditto (1500) . . . . . . | " |
| 275 | " | Stucco head (1800) . . . . . . | 6½" × 4¾" |
| 276 | " | Terracotta head (1452) . . . . . . | " |
| 277 | " | Terracotta moulds (1115, 1116 and 223) . . | " |
| 278 | " | Terracotta head (1863) . . . . . . | " |
| 279 | " | Earthen reliquary (C. H. 2021) found in Stūpa P⁸ . . | " |
| 280 | " | Ivory and stone beads . . . . . . | " |
| 281 | " | Ivory and stucco objects (651, 1725, 1900, 1606) . | " |
| 282 | " | Small copper bell and handle . . . . . | " |
| 283 | " | Copper rings and copper *trisula* . . . . . | " |
| 284 | " | Silver scroll from G⁵ (eye copy) . . . . | 8½" × 6½" |
| 284a | " | Ditto ditto . . . . . . | " |
| 285 | Manikyala. | General view of stūpa from N.-E. . . . . . | " |
| 286 | " | " " from S.-E. . . | " |
| 287 | " | Detailed view of stūpa . . . . | " |
| 288 | Takht-i-Bahi. | Stucco head . . . . . . . . . | " |
| 289 | " | Ditto . . . . . . . . | " |
| 290 | " | Ditto . . . . . . . . | " |
| 291 | " | Ditto . . . . . . . | " |
| 292 | " | Ditto . . . . . . . . | " |

APPENDIX D—*concld.*

| No. | Place. | Subject. | Size. |
|---|---|---|---|
| 293 | Takht-i-Bahi. | Stucco head . . . . . . . . . | $8\frac{1}{2}'' \times 6\frac{1}{4}''$ |
| 294 | Akra. | Stucco sculpture (purchased) . . . . . . | " |
| 295 | " | Stone sculpture (purchased) . . . . . . | " |
| 296 | Sirkap. | Stone dish carved with 3 figures (1913) . . . | " |

## APPENDIX E.

*Report on the Archæological Section of the Indian Museum, 1913-14.*

*Establishment.*—Dr. D. B. Spooner, Superintendent, Archæological Department, Eastern Circle, remained as my Deputy in charge of the Archæological Section throughout the year. There were no additions to or changes in the staff of this Section.

2. *Leave.*—The Assistant Superintendent was absent on privilege leave for thirty days, from the 5th May to the 3rd June, both days inclusive.

3. *Library.*—Forty-five books were added to the Archæological Library during the year, four being purchased and the rest received as presents. The late Raja Sir Sourendra Mohan Tagore presented a set of "Boro Budoer", published by the Government of the Netherlands in 1880, to the Trustees, who made it over to this Section as a permanent loan.

Pandit Bidyabinod was engaged in compiling a catalogue raisonné of the books in the Archæological Library on the model of the catalogue of the Director General's library in Simla.

4. *Photographs.*—1,630 photographic prints in all were received during the year from the different Circles of the Archæological Department as well as from the Director General of Archæology in India.

5. *Galleries.*—The Trustees of the Victoria Memorial vacated the new gallery on the ground floor of the new wing, which had been lent to them in 1911. This gallery will be fully utilized during the ensuing year. Meanwhile, the Assistant Superintendent and the Gallery Assistant have removed to it the spare collection of Gandhara sculptures made by Dr. Caddy, and classified them under Dr. Spooner's direction.

A new show-case in the Gupta Gallery was fitted with stands and glass shelves during the year and the specimens exhibited in the old show-case were transferred to it. The design of this show-case, which was prepared by Mr. Percy Brown, A.R.C.A., of the Government School of Art, is much superior to any existing in the Archæological Section, and three more show-cases of the same type have since been purchased for the new gallery.

Under the direction of Dr. D. B. Spooner, Pandit Bidyabinod, Gallery Assistant, prepared new labels of all the Sanskritic records, and Maulvi Jamaludin Muhammad a list of all Muhammadan records, in the Inscription Gallery. Pandit Bidyabinod also prepared a list of specimens in the Gupta Gallery ranging in date from the 5th to 12th century A.D. and arranged them chronologically according to the palæography of the donative inscriptions. He also wrote a note on certain inscribed clay tablets, which Dr. Annandale asked him to examine. This note has been published by the Superintendent in the *Journal and Proceedings of the Asiatic Society of Bengal, Volume IX.*

6. *Coin room.*—Mr. R. D. Banerji, the Assistant Superintendent, remained in charge of the coin room throughout the year, and was mainly engaged in selecting coins for the next volume

APPENDIX E—contd.

of the coin catalogue. For this purpose he examined about six thousand coins, out of which more than two thousand five hundred were chosen for publication. The selected coins are classified under twelve heads; namely :—(1) North-Eastern Frontier; (2) Mysore; (3) South India; (4) Nizam of Haidarabad; (5) North-Western Frontier; (6) Central India; (7) Indore; (8) Lucknow; (9) Bombay Presidency; (10) Rajputana; (11) French and English East India Companies; and (12) Miscellaneous. As it is impossible to find a numismatist sufficiently intimate with each and every one of these classes of coins to undertake the complete catalogue, arrangements are being made to divide the work among several numismatists.

Mr. R. D. Banerji was further engaged in cleaning and examining a collection of about three thousand punch-marked coins found in the Purneah District, with a view to publish them in the *Annual Report of the Archæological Department.*

7. *Centenary Celebrations.*—In connexion with the conversazione held by the Trustees on January 14th, 1914, in celebration of the Centenary of the Museum, the following Archæological exhibits were displayed:—(1) Jewellery and other objects recently discovered at Taxila. (2) The evolution of the Buddha Image. (3) Scenes from the Life of Budhda. (4) Bronze Images. (5) Inscriptions. (6) Seals. (7) Votive tablets. (8) Coins.

8. *Prehistoric Antiquities.*—During the year the collections of stone and copper implements, prehistoric pottery, etc., were catalogued by Mr. J. Coggin Brown, M.Sc., F.G.S., Assistant Superintendent, Geological Survey of India. These collections will be duly displayed in the new gallery during the ensuing year.

9. *Tours.*—Mr. R. D. Banerji, the Assistant Superintendent, was sent to copy inscriptions in the Barabar and Nagarjuni caves in the Gaya District in September, and again, in October, to collect information and copy inscriptions in the Khandagiri caves near Bhuvaneswar, Orissa. Pandit Bidyabinod was also deputed in the same month to Bhuvaneswar to examine some historical manuscripts.

10. *Treasure Trove.*—Four finds of Treasure Trove coins were examined during the year :—

(1) A find of 454 copper Kushan coins found at Khaddi, Hazoor Tahsil, Rewah State.

(2) A find of 48 silver coins of the Chandella Madanavarman, found at Panwar, Tahsil Teonthal, in the Rewah State.

(3) A find of 19 gold coins, containing coins of Gangeyadeva Chedi, Kirttivarman, Sallakshanavarman and Madanavarman of the Chandella dynasty, Govinda Chandra of Kanauj, and Mahipala of the Tomara family.

These three finds were sent by the Agent to the Governor-General in Central India for examination.

(4) A find of 2,873 silver punch-marked coins, found in the bed of the Kosi river, in the Purneah District. About 500 coins of this find were cleaned during the year.

11. *New Accessions.*—The following additions were made to the archæological collections :—

(i) *Miscellaneous.*—(a) Mr. J. F. Blakiston, Assistant Superintendent, Archæological Survey, Eastern Circle, discovered at Rampurwa and presented to the Museum one of the ears of the stone Bull capital of the uninscribed Asoka pillar, which had been unearthed there in 1909.

(b) Mr. F. H. Gravely, M. Sc., Assistant Superintendent, Zoological and Anthropological Section, presented a clay tablet, which he found at Dhamathat, near Moulmein, in December, 1911.

(c) Mr. M. H. Arnott, lately of the Indian Public Works Department, made over two sculptures which had become detached from the Lingaraj temple at Bhuvaneswar, and could not be restored to their original position.

## APPENDIX E—concld.

(*ii*) *Coins.*—Altogether 205 coins were added to the cabinet during the year :—33 gold, 151 silver, 2 Billon, and 19 copper. Three gold coins were purchased from a Muhammadan dealer in Calcutta; the rest were donations. Coins were received from the Governments of Bombay (through the Bombay Branch of the Royal Asiatic Society), Madras, United Provinces, Bihar and Orissa, and the Agent to the Governor-General in Central India. The Durbars of Jaipur, Diwas, and Jath presented Treasure Trove coins found within their jurisdiction.

Below is a classified list of coins added to the cabinet :—

| Class. | Gold. | Silver. | Copper. |
|---|---|---|---|
| Imperial Guptas . . . . . . | 2 | ... | ... |
| Mediæval . . . . . . | 7 | ... | ... |
| Unknown . . . . . . | 2 | ... | 2 |
| South Indian . . . . . . | 8 | ... | ... |
| Mughal . . . . . . . | 1 | 126 | 5 |
| Sultans of Malwa . . . . . | ... | ... | 6 |
| Sultans of Gujrat . . . . . | ... | 8 | ... |
| Sultans of Jaunpur . . . . . | ... | ... | 5 |
| Native States . . . . . . | ... | 6 | ... |
| Sultans of Bijapur . . . . . | ... | 5 | ... |
| East India Companies . . . | ... | 1 | ... |
| Foreign . . . . . . . | 13 | ... | ... |
| Sultans of Delhi . . . . . | ... | 5 | |
| | | Billon 2 | |
| TOTAL . | 33 | 151+2 | 19 |

12. It gives me much pleasure to testify to the good work done by the Assistant Superintendent, Mr. R. D. Banerji, and his staff during the year under review.

SIMLA;
*July 24th, 1914.*

J. H. MARSHALL,
*Director General of Archæology in India.*

## *Honorary Correspondents of the Archæological Department.*

1. Archæological Commissioner for Ceylon, Anuradhapura.
2. Monsieur M. A. Barth, Membre de l'Institut, 10, Rue Garancière (Paris VIe), France
3. H. C. P. Bell, Esq., late Archæological Commissioner, Candy, Ceylon.
4. Sir R. G. Bhandarkar, K.C.I.E., Sangam, Poona, India.
5. C. O. Blagden, Esq., Redcourt, Champion Hill, London, S.E.
6. Dr. James Burgess, C.I.E., LL.D., 22, Seton Place, Edinburgh.
7. Hon'ble Mr. R. Burn, Chief Secretary, United Provinces, India.
8. Dr. A. K. Coomaraswamy, The Manor House, Britford, Nr. Salisbury, England.
9. H. Cousens, Esq., c/o Messrs. Grindlay and Co., 54, Parliament Street, London.
10. Lord Curzon of Kedleston, 1, Carlton House Terrace, London, S.W.
11. Director of Archæology in Netherlands India, Batavia.
12. Directeur de l'Ecole Française d'Extrême Orient, Hanoi, Indo-China.
13. Monsieur L. Finot, 11, Rue Poussin, Paris (XVIe), France.
14. Dr. J. F. Fleet, C.I.E., Ph.D., 8, Leopold Road, Ealing, London, W.
15. Monsieur A. Foucher, 16, Rue de Staël, Paris (XVe), France.
16. Sir George Grierson, K.C.I.E., Ph.D., Rathfarnham, Camberley, Surrey, England.
17. Lieutenant-Colonel T. W. Haig, His Britannic Majesty's Consulate General, Meshed, Persia.
18. Dr. A. F. Rudolf Hœrnle, C.I.E., Ph.D., 8, Northmoor Road, Oxford.
19. G. R. Kaye, Esq., Curator, Bureau of Education, Simla.
20. Professor H. Kern, Utrecht, Holland.
21. Professor Sten Konow, Ph.D., Villa Vaikuntha, Bestum, *viâ* Christiania, Norway.
22. Pandit Hira Lal, Rai Bahadur, Extra Assistant Commissioner, Nagpur, India.
23. Dr. C. R. Lanman, Harvard University, 9, Farrar Street, Cambridge, Massachusetts, U.S.A.
24. Professor Sylvain Lévi, Professor, Collège de France, Rue Guy-de-la Brasse 9, Paris, France.
25. Major C. E. Luard, Foreign Department, Government of India.
26. Professor A. A. Macdonell, M.A., Ph.D., Lochgarry Lodge, Banbury Road, Oxford.
27. Shams-ul-ulama Jivanji Jamshedji Modi, B.A., Honorary Secretary, Anthropological Society of Bombay, Bombay, India.
28. Mr. R. Narasimhachar, M.A., Officer-in-charge of Archæological Researches, Mysore, Mallesvaram, Bangalore, India.
29. F. E. Pargiter, Esq., 12, Charlbury Road, Oxford.
30. Professor E. J. Rapson, 8, Mortimer Road, Cambridge.
31. Professor T. W. Rhys-Davids, Harboro' Grange, Ashton-on-Mersey, Cheshire, England.
32. Mahamahopadhya Pandit Haraprasad Shastri, 26, Pataldanga Street, Calcutta.
33. Monsieur E. Senart, Membre de l'Institut, 18, Rue François I, Paris, France.
34. R. Sewell, Esq., 51, Bedford Gardens, Campden Hill, Kensington, W., London.
35. Professor Sergius d'Oldenburg, Secretary, Imperial Academy of Sciences, Petrograd, Russia.
36. Vincent A. Smith, Esq., 116, Banbury Road, Oxford.
37. Professor J. Takakusu, Imperial University, Tokio, Japan.
38. Sir Richard Temple, Bart., C.I.E., The Nash, Worcester, England.
39. F. W. Thomas, Esq., India Office Library, Whitehall, London, S.W.
40. Professor M. Van Berchem, Geneva University, Geneva, Switzerland.
41. Prof. J. Ph. Vogel, Ph.D., Leiden University, Leiden, Holland.
42. Dr. A. Venis, C.I.E., Superintendent of Sanskrit Studies, United Provinces, Benares.
43. Colonel L. A. Waddell, C.B., C.I.E., The Deodars, Park Drive, Hampstead, London, N.W.



## List of Public Institutions, Libraries, etc., to which copies of Archæological Survey Reports are regularly supplied.

### I.—COUNTRIES OUTSIDE INDIA.

#### United Kingdom.

Aberdeen University Library, Aberdeen.

Royal Library, Windsor Castle, Berks.

Birmingham University Library.

Bendall Library, Cambridge.

Cambridge University Library, Cambridge.

National Library of Ireland, Leinster House, Kildare Street, Dublin.

Royal Irish Academy, 19, Dawson Street, Dublin.

Trinity College Library, Dublin.

Advocates' Library, Edinburgh.

University Library, Edinburgh.

Royal Society, Edinburgh.

Royal Scottish Museum, Edinburgh.

Society of Antiquaries of Scotland, National Museum of Antiquities, Queen Street, Edinburgh.

Glasgow University Library, Glasgow.

British Museum Library, Great Russell Street, Bloomsbury, London, W.C.

Folklore Society, 11, Old Square, Lincoln's Inn, London, W.C.

India Office Library, London, S.W.

Imperial Institute, London, S.W.

Library of the Oriental Department of the British Museum, London, W.C.

London Library, St. James's Square, London, S.W.

London University Library, Imperial Institute, London, S.W.

National Art Library, South Kensington Museum, London.

Royal Academy of Arts, Burlington House, Piccadilly, London, W.

Royal Anthropological Institute of Great Britain and Ireland, 50, Great Russell Street, London, W.C.

Royal Asiatic Society, 22, Albemarle Street, London, W.

Royal Colonial Institute, Northumberland Avenue, London, W.C.

Royal Institute of British Architects, 9, Conduit Street, Hanover Square, London, W.

Royal Society, Burlington House, Piccadilly, London, W.

Society of Antiquaries of London, Burlington House, Piccadilly, London, W.

Society for the Protection of Ancient Buildings, 10, Buckingham Street, Adelphi, London, W.C.

Society for the Promotion of Hellenic Studies, London.

Bodleian Library, Oxford.

Indian Institute, Oxford.

#### France.

Bibliothéque Nationale, Paris.

Bibliothéque J. Doucet, 19, Rue Spontini, Paris.

Directeur Général de l'Union Coloniale Française, 44, Chaussée d'Antin, Paris.

L'École spéciale des Langues Orientales Vivantes, Paris.

Institut de France, Paris.

Institut Ethnographique International de Paris, 28, Rue Bonaparte, Paris.

Musée Guimet, 7, Place d'Iéna, Paris.

Revue Archéologique, 28, Rue Bonaparte, Paris.

Société Asiatique, 1, Rue de Seine, Paris.

Université de Lyons.

#### Italy.

R. Biblioteca Nazionale, Centrale di Firenze, Italy.

Societá Asiatica Italiana, Firenze, Italy.

American School of Classical Studies at Rome.

Biblioteca Nazionale, Vittorio Emanuele, Rome.

British School at Rome, Palazza Odescalchi, Piazza S. S. Apostoli, Rome.

HOLLAND.

Koninklijke Akademie van Wetenschappen te Amsterdam, Holland.

Koninklijk Institut van Nederlandsch Inde, The Hague, Holland.

RUSSIA.

Imperial Academy of Sciences (for the Asiatic Museum), Petrograd, Russia.

DENMARK.

National Museum, Copenhagen, Denmark.

Royal Library, Copenhagen, Denmark.

BELGIUM.

Academie Royale d'Archéologie de Belgique, Anvers.

SWEDEN.

University Library, Upsala, Sweden.

NORWAY.

University Library, Christiania.

GREECE.

British School at Athens, Greece.

La Société Archéologique d'Athènes, Athens.

JAPAN.

President, Asiatic Society of Japan, Tokio.

CHINA.

North China Branch of the Royal Asiatic Society, Shanghai.

AMERICA.

Field Museum of Natural History, Chicago, U. S. A.

American Oriental Society, 235, Bishop Street, New Haven, Conn., U. S. A.

Free Library of Philadelphia, U. S. A.

American Philosophical Society, Philadelphia.

Secretary, National Museum, Washington, U. S. A.

Smithsonian Institution, Washington, D. C., U. S. A.

SIAM.

Vajiranana National Library, Bangkok.

BRITISH COLONIES.

Royal Asiatic Society, Ceylon Branch, Colombo.

The Museum, Canterbury, New Zealand.

Melbourne Library, Melbourne, Australia.

Victoria Public Library, Perth, Western Australia.

Literary and Historical Society, Quebec, Canada.

University Library, Sydney, New South Wales.

Straits Branch, Royal Asiatic Society, Singapore.

FOREIGN COLONIES.

Bataviaasch Genootschap van Kunsten en Wetenschappen, Batavia.

L'Institut Français d'Archéologie Orientale du Caire, Cairo, Egypt.

Museum of Arabic Art, Cairo, Egypt.

L'Ecole Française d'Extrême Orient, Hanoi, Indo-Chine.

Ethnological Survey for the Philippine Islands, Department of Interior, Manila.

## II.—INDIA.

### (1) IMPERIAL.

Central Library, Army Headquarters, Simla.

Department of Education Library, Delhi.

Imperial Library, Calcutta.

Indian Museum, Calcutta.

### (2) PROVINCIAL.

MADRAS.

The Government College, Kumbakonam.

Christian College Library, Madras.

Government Central Museum, Madras.

Pachaiyappa's College, Madras.

Presidency College, Madras.

Public Library, Madras.

School of Art, Madras.

Secretariat Library, Fort St. George.

University Library, Madras.

St. Aloysius College, Mangalore.

Noble College, Masulipatam.

The Sanskrit College, Mylapore.

The Government College, Rajahmundry.

The Teacher's College, Saidapet, Chingleput District.

St. Joseph's College, Trichinopoly.

S. P. G. College, „

Maharajah's College, Trivandram.

The Sanskrit College, Tiruvadi.

Maharajah's College, Vizianagram.

BOMBAY.

Gujarat College, Ahmedabad.

Bombay Branch of the Royal Asiatic Society, Town Hall, Bombay.

Elphinstone College, Bombay.

Prince of Wales Museum, Bombay.

St. Xavier's College, Bombay.

Secretariat Library, Bombay.

School of Art, Bombay.

University Library, Bombay.

Wilson College, Bombay.

The College of Science, Poona.

Deccan College, Poona.

Fergusson College, Poona.

BENGAL.

Wesleyan Mission College, Bankura.

Barisal Public Library, Barisal.

Burdwan Raj Public Library, Burdwan.

Asiatic Society of Bengal, 57, Park Street, Calcutta.

Bangabasi College, Calcutta.

Bengal Chamber of Commerce, Calcutta.

Bangiya Sahitya Parishad Sabha, Calcutta.

Bethune College, Calcutta.

Calcutta Historical Society, Calcutta.

Calcutta University Institute, College Square, Calcutta.

Chaitanya Library, 4-1, Beadon Street, Calcutta.

Church Mission Society, Calcutta.

Economic Museum, Calcutta.

Editor, Bengal Past and Present, Kidderpore Vicarage, Calcutta.

Goethals' Indian Library, 30, Park Street, Calcutta.

Government School of Art, Calcutta.

Library of the United Service Club, Calcutta.

L. M. S. College, Bhowanipur, Calcutta.

Mahabodhi Society, Baniapooker Lane, Calcutta.

BENGAL—*contd.*

Metropolitan Institution, Calcutta.
Presidency College Library, 1, College Square, Calcutta.
Sanskrit College Library, 1, College Square, Calcutta.
Scottish Churches College, Calcutta.
Secretariat Library, Writers' Buildings, Calcutta.
University Library, The Senate House, Calcutta.
Hooghly College, Chinsura.
Chittagong College.
Beer Chandra Public Library at Comilla.
Dacca College.
Northbrook Hall Library, Dacca.
Provincial Library, Dacca.
Jugannath College, Dacca.
Krishnagar College, Krishnagar.
Daulatpur Hindu Academy, Khulna.
Midnapur College, Midnapore.
Narail Victoria College, Narail.
Rajshahi College, Rajshahi.
Varendra Research Society, Rajshahi.
Serampore College, Serampore.
Civil Engineering College, Sibpur.

BIHAR AND ORISSA.

Bihar National College, Bankipore.
Bihar and Orissa Secretariat Library.
Bihar School of Engineering, Bankipore.
Patna College, Bankipore.
Ravenshaw College, Cuttack.
St. Columba's College, Hazaribagh.

UNITED PROVINCES.

Agra College, Agra.
Palace Library of the Most Revd. the Archbishop at Agra.
St. John's College, Agra.
Lyall Library, Aligarh.
M. A. O. College Library, Aligarh.
Christian College, Allahabad.
Muir Central College, Allahabad.
Panini Office, Allahabad.
Public Library, Allahabad.
Secretariat Library, Public Works Department, Allahabad.
University Library, Allahabad.
Carmichael Library, Benares.
Central Hindu College, Benares.
Queen's College, Benares.
Sanskrit College, Benares.
Christ's Church College, Cawnpore.
Fyzabad Museum, Fyzabad.
Canning College, Lucknow.
Provincial Museum Library, Lucknow.
Public Library, Lucknow.
Lyall Library, Meerut.
Archæological Museum, Muttra.
Thomason College, Roorkee.

PUNJAB.

Khalsa College, Amritsar.
Aitchison College, Lahore
Central Training College, Lahore.
Dyal Singh College, Lahore.
Dayanand Anglo-Vedic College, Lahore.
Forman Christian College, Lahore.
Government College Library, Lahore.
Islamia College, Lahore.
Museum Library, Lahore.
Punjab Historical Society, Lahore.
Punjab Public Library, Lahore.
Secretariat Library, Public Works Department, Lahore.
University Library, Lahore.

DELHI.

The Museum of Archæology, Delhi.
Public Library, Delhi.
St. Stephen's College, Delhi.

North-West Frontier Province.

Peshawar Museum, Peshawar.

Secretariat Library, Peshawar.

Burma.

Myanma Awba Club, Kyaiklat, Pyapon District.

Mandalay Public Library, Mandalay.

Buddhist Library, Nathinggyaung, Bassein District.

Buddhist Propaganda Society, Pegu.

Young Men's Buddhist Association, Pegu.

Baptist College, Rangoon.

Bernard Free Library, Rangoon.

Burma Research Society, Rangoon.

Cedi Yengana Association Library, Shwe Dagon Pagoda, Rangoon.

Phayre Museum, Rangoon.

Rangoon College, Rangoon.

Rangoon Literary Society, Rangoon.

Secretariat Library, Rangoon.

Soolay Pagoda Library, Rangoon.

Teachers' Institute, Rangoon.

Young Men's Buddhist Association, Rangoon.

Office of Trustees of the Shwe Dagon Pagoda, Rangoon.

Assam.

Cotton Library, Dhubri.

Cotton College, Gauhati.

Curzon Hall Library, Gauhati.

Government Library, Shillong.

Secretariat Library, Shillong.

Victoria Jubilee Library, Tezpur.

Central Provinces.

Public Library of Amraoti Town.

High School Committee, Balaghat.

Government College, Jubbulpore.

Training College, Jubbulpore.

Jagannath High School, Mandla.

Hislop College, Nagpur.

Morris College, Nagpur.

Museum Library, Nagpur.

Secretariat Library, Nagpur.

Victoria Technical Institute Library, Nagpur.

Public Library, Saugor.

Victoria Library, Seoni.

Coorg.

The Chief Commissioner of Coorg's Library, Bangalore.

(3) Native States.

*Mysore.*

Central College, Bangalore.

Indian Institute of Science, Bangalore.

Maharaja's College, Mysore.

*Hyderabad.*

The Resident's Library, Hyderabad.

*Gwalior.*

Gwalior Durbar Library, Gwalior.

*Central India.*

Dhar Museum Library, Dhar.

Library of the Agent to the Governor-General, Indore.

Office of the Public Works Secretary to the Agent to the Governor-General, Central India.

Rajkumar College, Indore.

*Rajputana.*

College Library, Ajmer.

Rajputana Museum, Ajmer.

Library of the Chief Commissioner and Agent to the Governor-General, Ajmer.

*Baroda.*

Library of the Resident at Baroda.

Baroda Museum.

*Kathiawar.*

Sir Bhagwatsingji Library, Gondal (Kathiawar).

Watson Museum of Antiquities, Rajkot.

*Chamba.*

Bhuri Singh Museum, Chamba.

*Travancore.*

Travancore Durbar Library.

CALCUTTA: PRINTED BY SUPDT. GOVT. PRINTING, INDIA, 8, HASTINGS STREET.

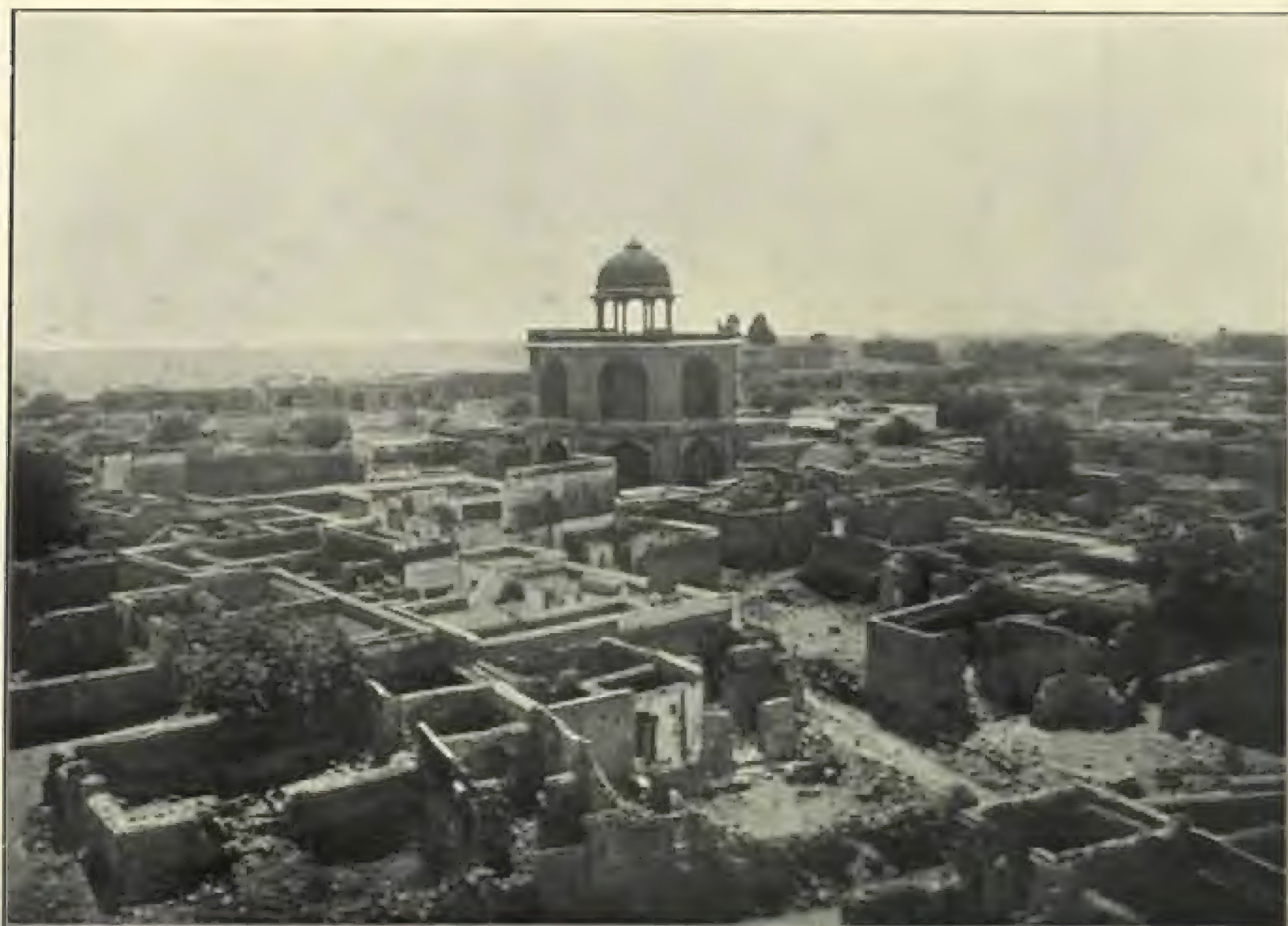


(a) DELHI: QUTB: WEST WALL OF MOSQUE SHOWING DOUBLE PLINTH.



(b) HISSAR: LAT-KI-MASJID: GENERAL VIEW AFTER EXCAVATION.

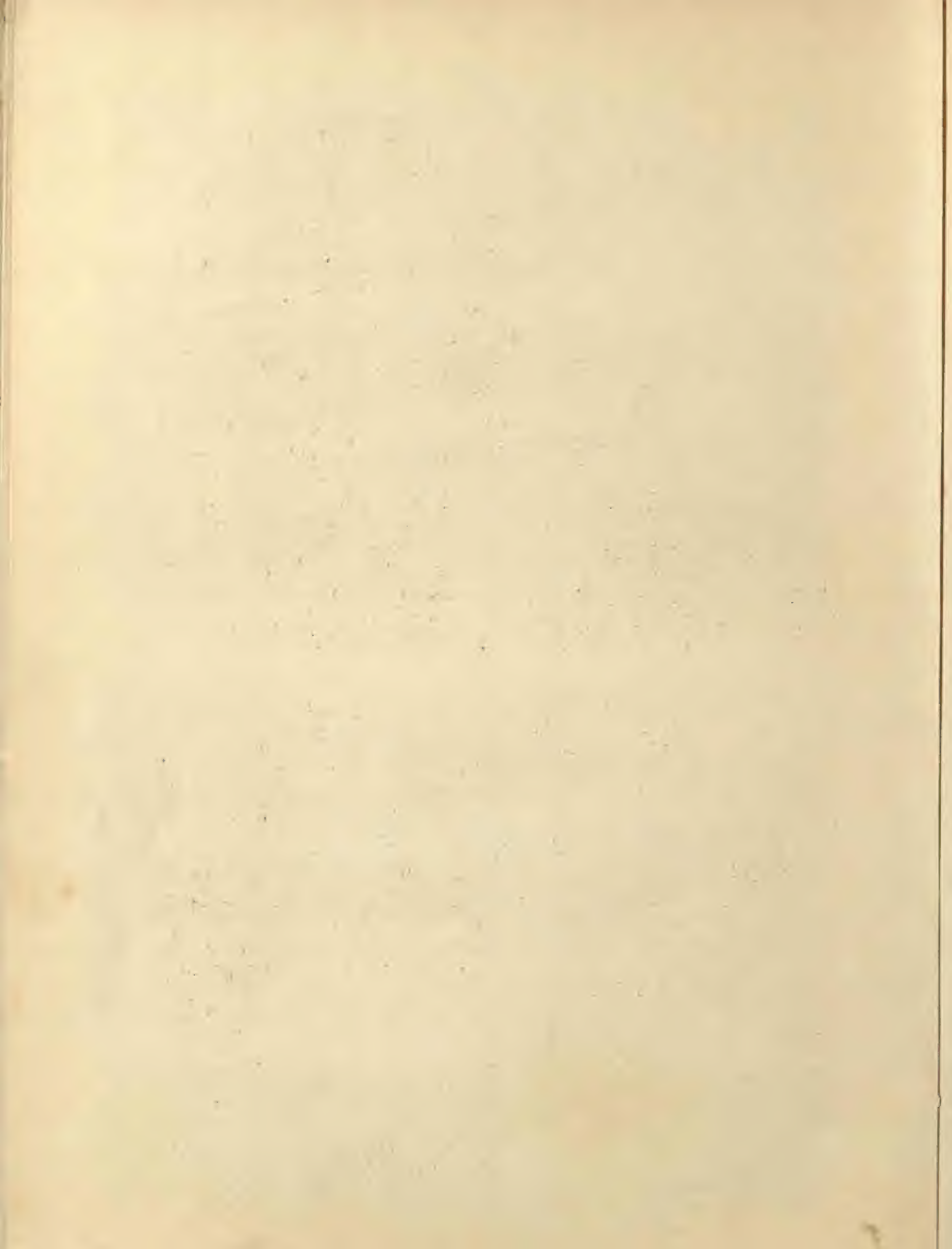




(a) DELHI: PURANA QILA: VIEW OF SHER MANDAL AND MODERN HOUSES AROUND BEFORE DEMOLITION.



(b) CHAMPAVAT: BALESVARA TEMPLE.





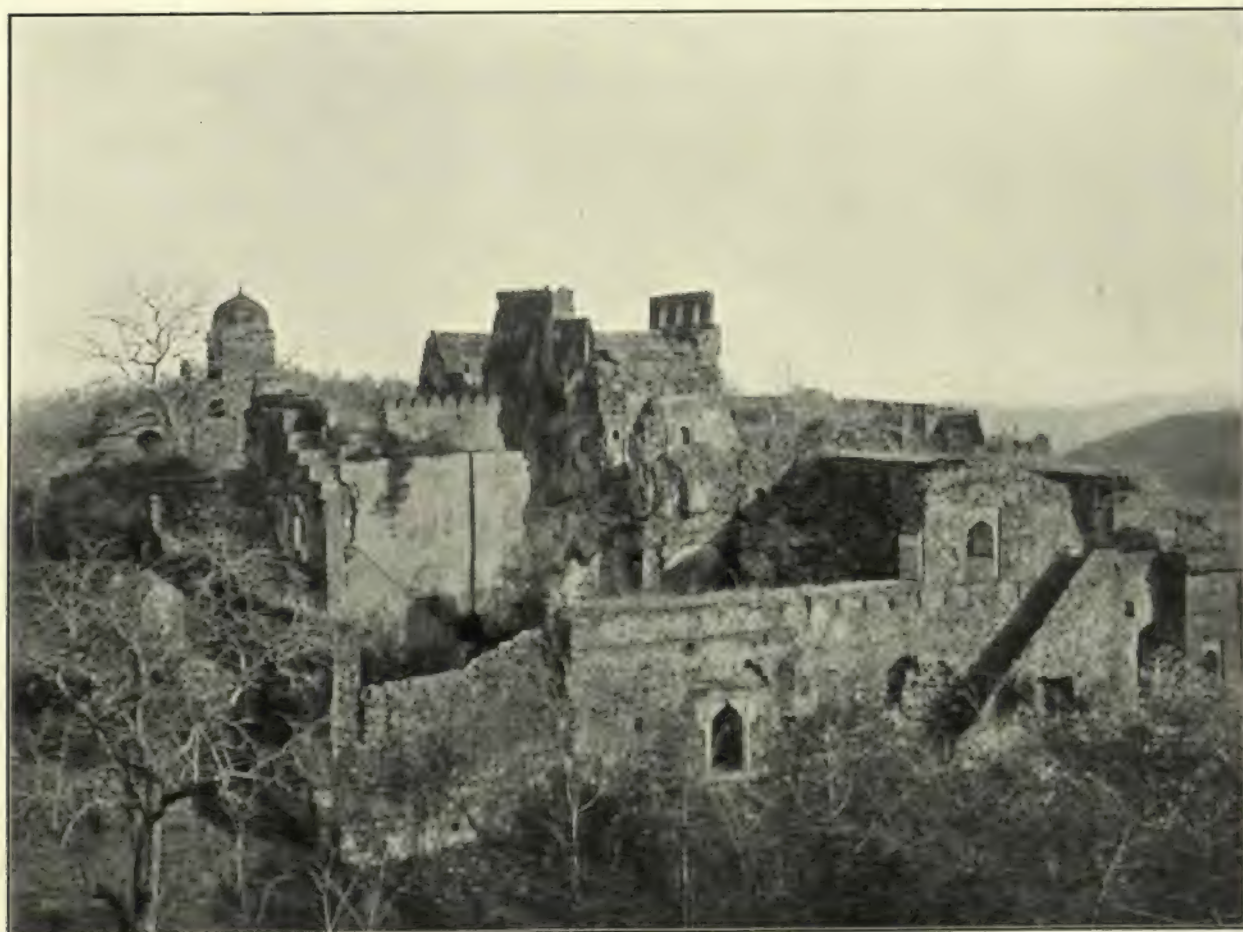
(*a*) JAGESVAR: NAVA DURGA TEMPLE



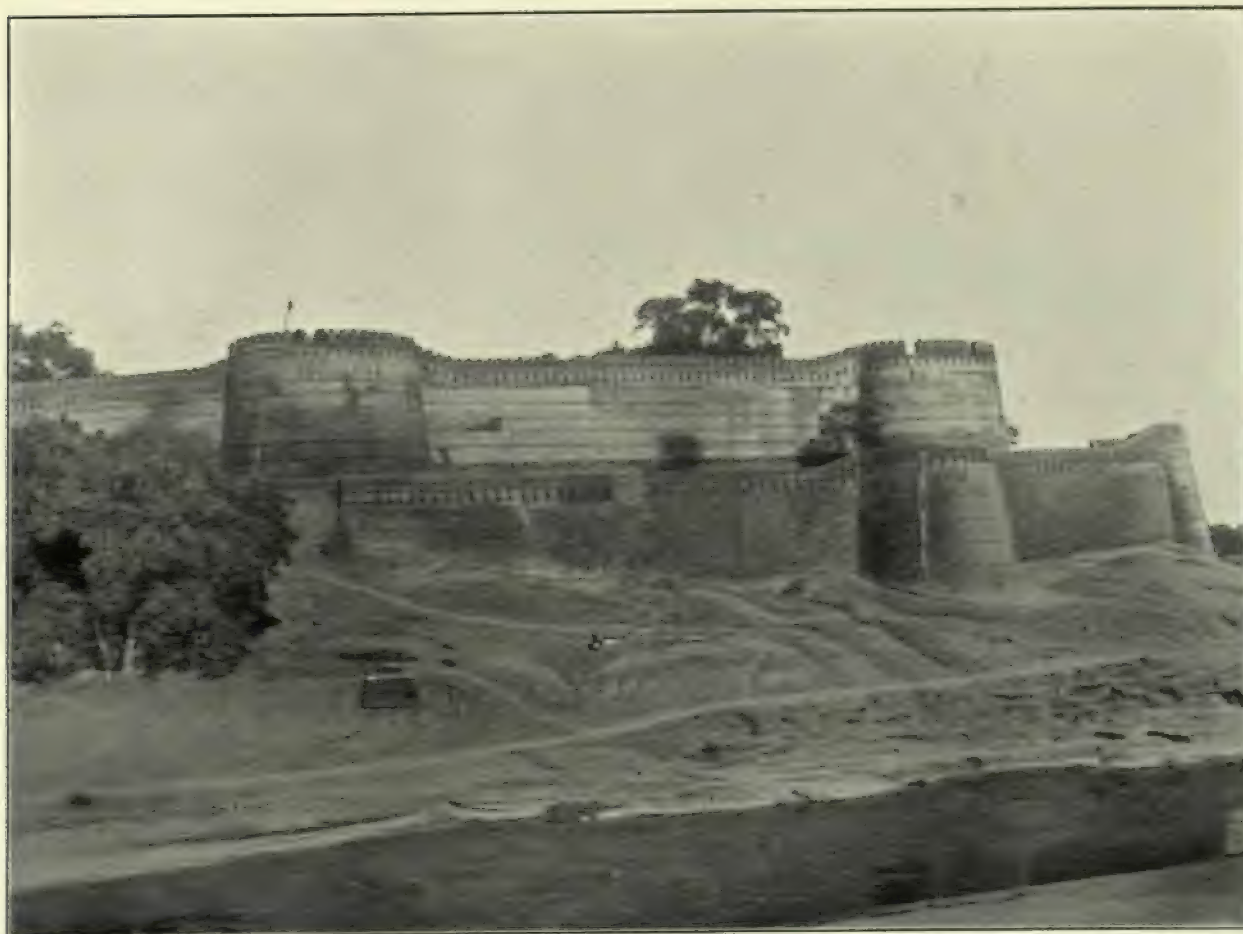
(*b*) DWARAHAT: GUJAR DEO TEMPLE

Photo.-Engraved & printed at the Offices of the Survey of India, Calcutta, [illegible]





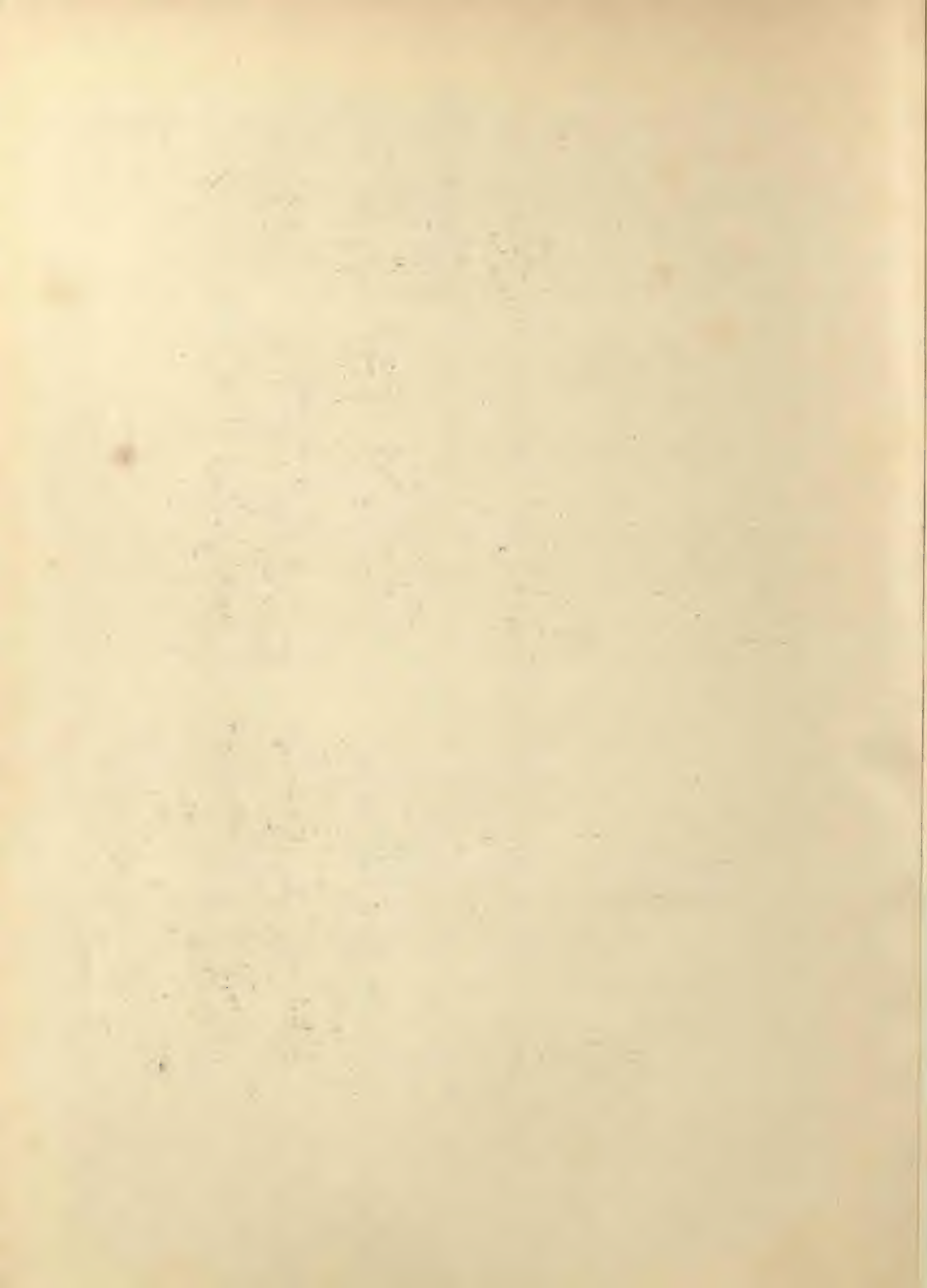
(a) CHHINDWARA: GENERAL VIEW OF DEOGARH FORT.



(b) AKOLA: GENERAL VIEW OF BALAPUR FORT FROM NORTH.



GENERAL VIEW OF GAWILGARH FROM CHIKALDA.





(a) BURHANPUR: BIBI MASJID.



(b) BASSEIN FORT: ST. PAUL'S CHURCH, FRONT VIEW.





(a) BASSEIN FORT: ST. PAUL'S CHURCH FROM N.E.



(b) BIJAPUR: ASAR MAHAL FROM N.E.



(a) Badami: Bhutanath temple from N.W.



(b) Aihole: Temple 14 from S.E.





(a) PATTADAKAL: PAPNATH TEMPLE FROM S. E.



(b) PATTADAKAL: VIRUPAKSHA TEMPLE FROM S. W.



(a) MUDABIDRI: CHANDRANATH JAIN TEMPLE FROM S. E.



(b) MUDABIDRI: MANASTAMBHA IN FRONT OF CHANDRANATH JAIN TEMPLE.




(a) KARKAL: CHATURMUKHA JAIN TEMPLE FROM S.W.



(b) BELTANGADI: JAMALABAD ROCK FORT FROM EAST.

(a) PATOTHAMYA PAGODA, PAGAN.



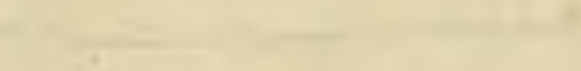
(b) BRONZE FIGURE OF BUDDHA FROM PATOTHAMYA PAGODA: FRONT VIEW.

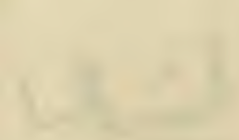


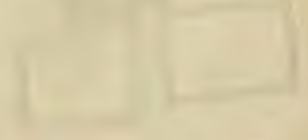
(c) THE SAME: BACK VIEW.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1915.

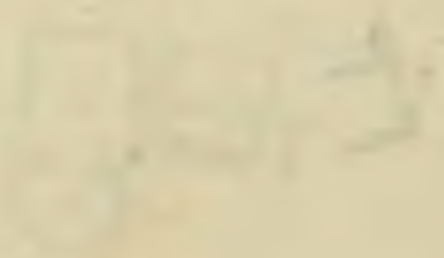






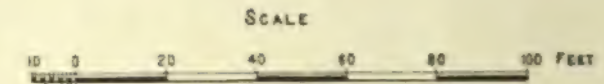








# DHARMARÂJIKA STŪPA




PLAN OF EXCAVATIONS AT DHARMARĀJIKA STUPA.



(a) EAST SIDE OF DHARMARAJIKA STUPA.



(c) SIRKAP: BLOCK D.


(b) DHARMARAJIKA STUPA: STUPAS $P^1$, $P^3$ & $P^6$.



(d) SIRKAP: BLOCK F.






*Scale: 10 feet = 1 square.*





(a) DHARMARAJIKA STUPA: SILVER SCROLL FROM BODHISATTVA CHAPEL.





(c) BUST OF DIONYSUS IN SILVER REPOUSSÉ.



(b) BRONZE FIGURE OF CHILD.

(d) SILVER SPOON.



(c¹) STAND OF DIONYSUS BUST.



(e) STUCCO HEAD OF SATYR.



(f) STUCCO HEAD.

Photo.-Engraved & printed at the Offices of the Survey of India, Calcutta



(a)



(b)



(a) & (b) Specimens of gold jewellery from Sirkap.

Photo-Engraved & printed at the offices of the Survey of India, Calcutta,



a



b



(a) Jandial: Mound C, before Excavation.

(b) The same, after Excavation.



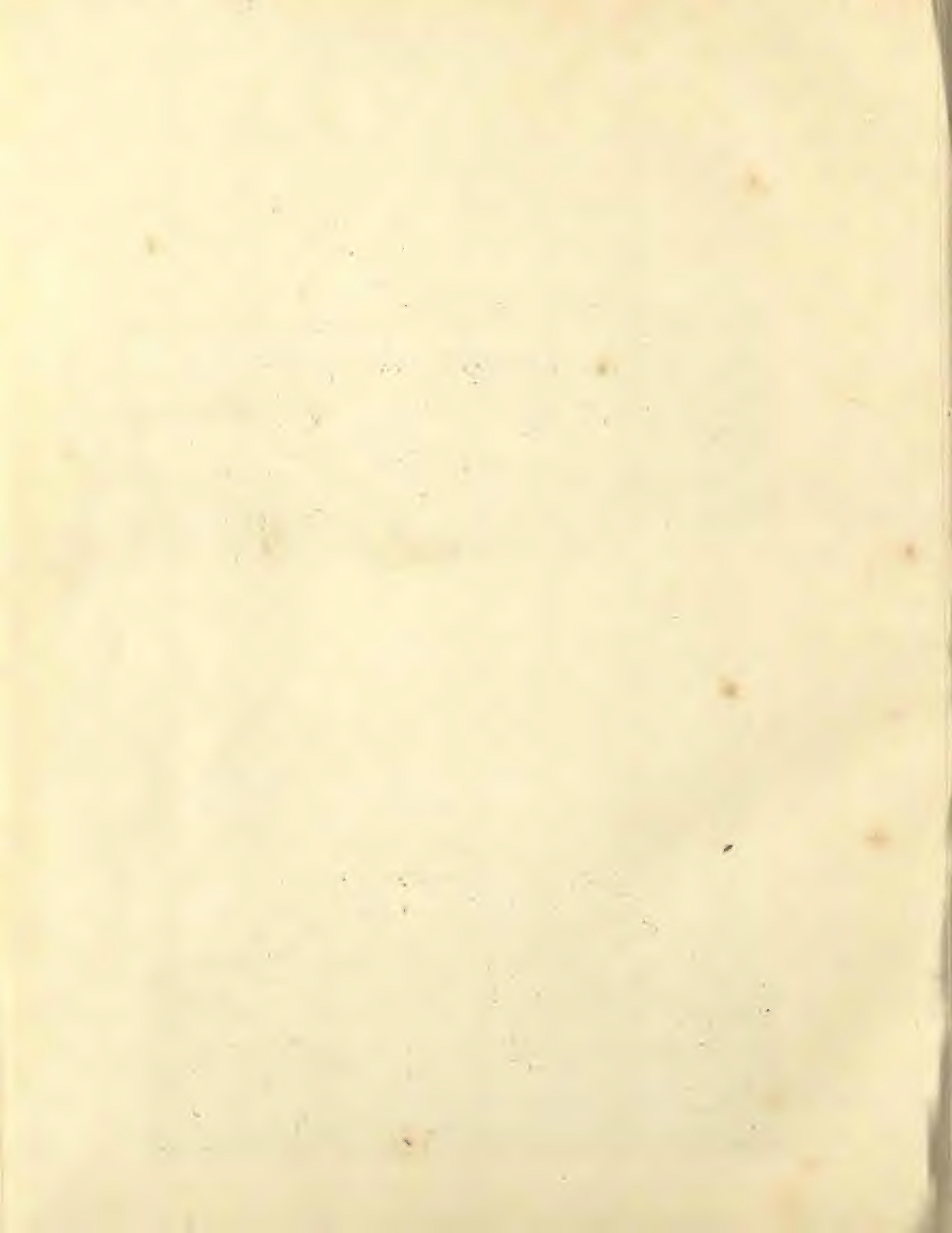


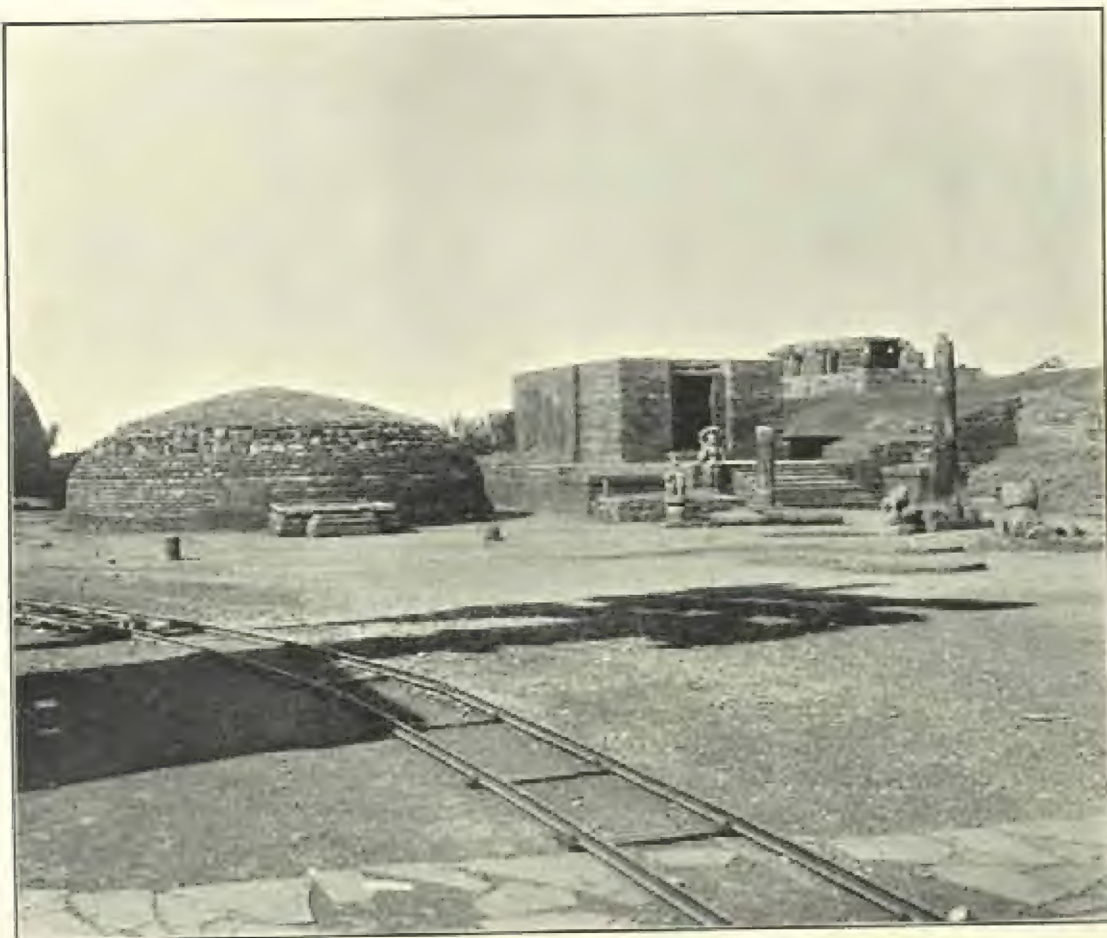
(*a*) SANCHI: GENERAL VIEW OF THE REMAINS FROM S.E.



(*b*) SANCHI: TOPE III FROM SOUTH.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta, 1915





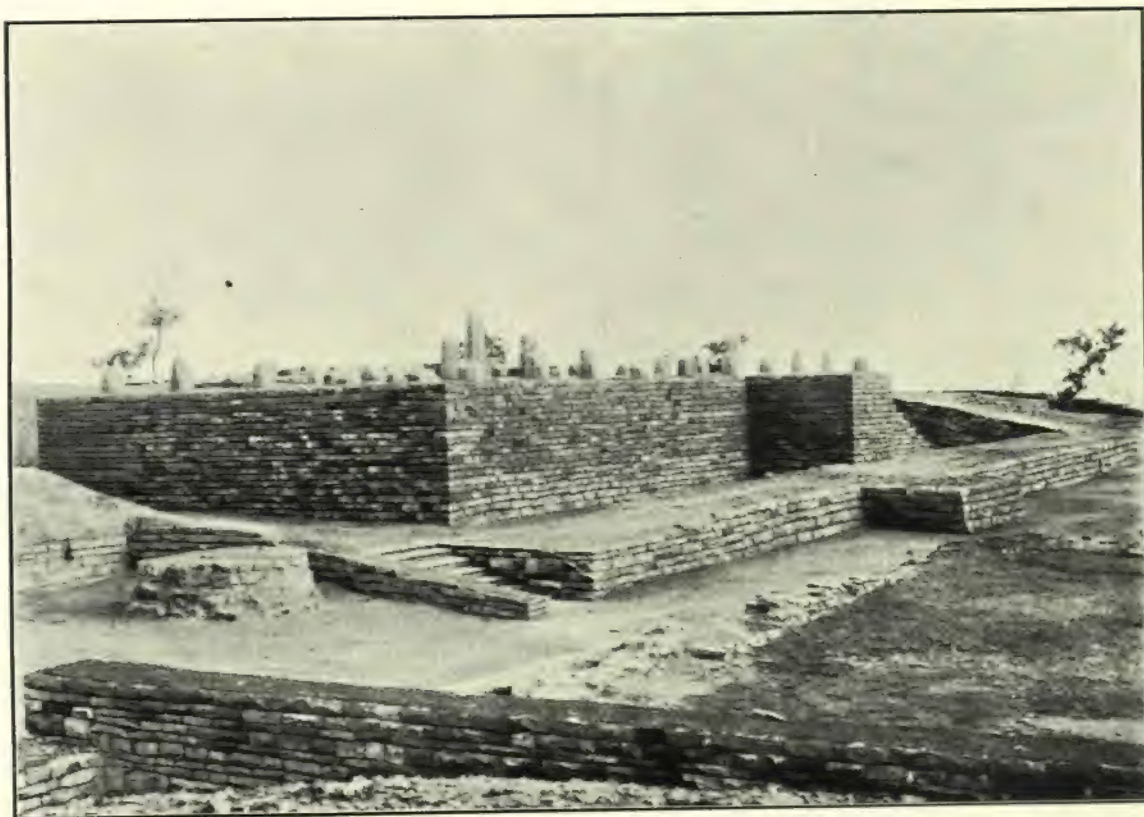
(a) Sanchi: Tope V and Temples XXXI & XXXII from S.W.



(b) Sanchi: General view of the remains from N.W.

Photo-Engraved & printed at the Offices of the Survey of India, Calcutta.



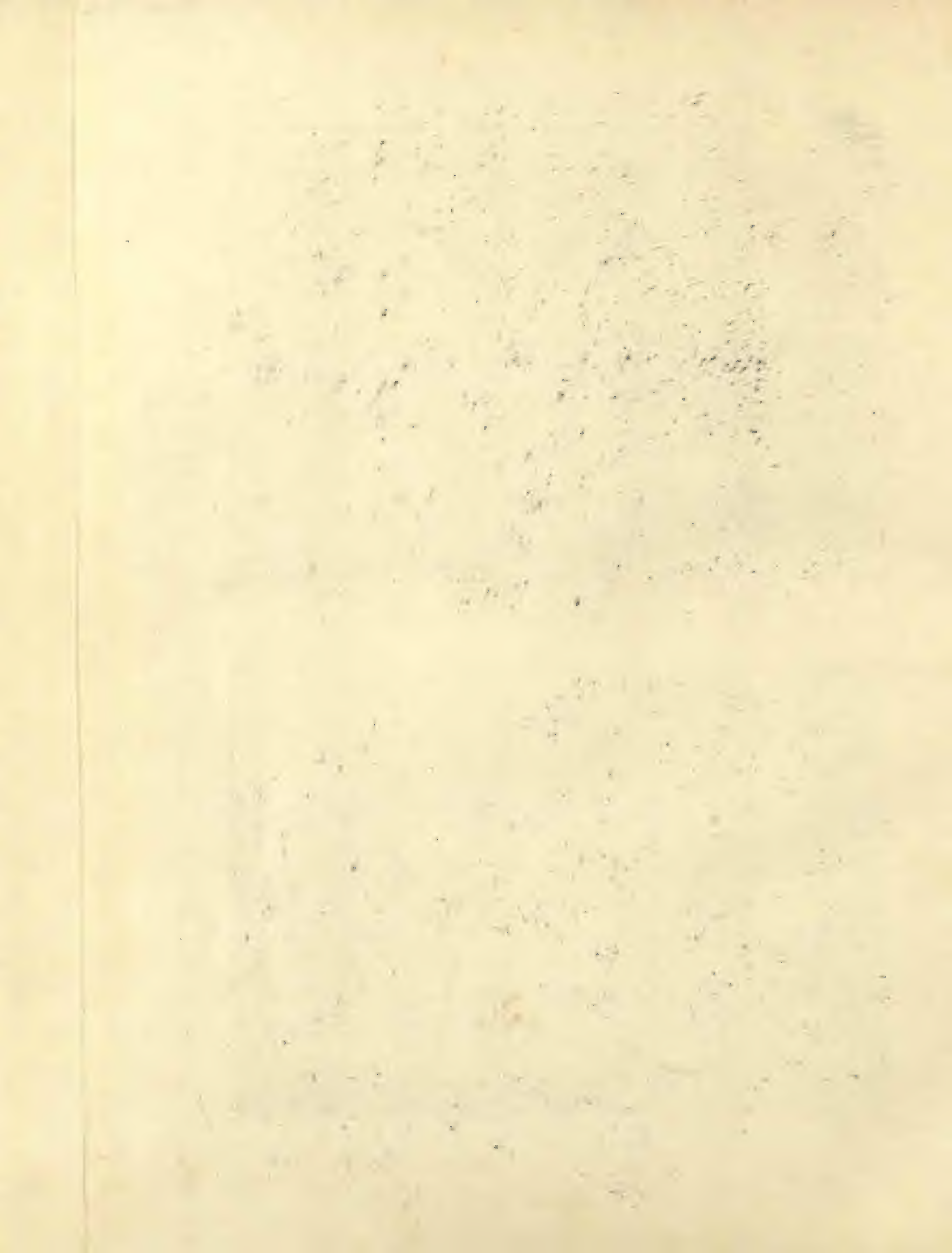


(*a*) Sanchi: Temple XXII from N.W.



(*b*) Sanchi: Monastery XX from S.E.

Photo-Engraved & printed at the offices of the Survey of India, Calcutta, 1915.



(a)



(b)



(a) & (b) SOLID RAILINGS AT BESNAGAR.





(*a*) Besnagar column.



(*b*)



(*d*)



(*c*)



(*e*)

(*b* & *c*) Enamelled plaques from Shwegugyi, Pagoda, Pegu.

(*d* & *e*) Enamelled plaques from Ajapala Pagoda, Pegu.

